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THE

HISTORY AND TREATMENT

OF THE

GENERALLY PREVAILING AFFECTIONS

USUALLY DENOMINATED

COLDS, COUGHS, &c.:

WITH

OBSERVATIONS ON THE LOCAL AND GENERAL INFLUENCE OF CLIMATE OVER THE HUMAN BODY,

At all Seasons of the Year.

AN EPITOME OF PRECEPTS ON DIET,

FOR ELDERLY PEOPLE, &c. &c.

WITH DIRECTIONS FOR THE

MANAGEMENT OF COLDS,—REGULATION OF THE SICK-ROOM,

—THE SELECTION AND USE OF APERIENT AND

OTHER MEDICINES, &c. &c.

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INTRODUCTION.

It is generally acknowledged, that the affections usually denominated Colds, are more prevalent among the English people than with the natives of most other countries. No constitution, however modified the susceptibility, is exempted from them; the mildest season of the year, the best constructed habitations, or the most suitable clothing, are not safeguards against the insidious influence of atmospheric varieties, if attention be not paid to local as well as general circumstances. The many recent instances of the truth of this assertion, where valuable lives have been lost and endangered, are too fresh in the public mind to require particular reference; too much caution, therefore, cannot be adopted to guard against so baneful an influence; particularly by directing the attention to many of the seemingly unimportant minutiæ, but which, in reality, are the principal points for our consideration, in the history of cold-catching. These surely cannot be deemed of a trivial nature, when we reflect that by far the greater number of

acute as well as chronic diseases, as rheumatism, asthma, consumption, inflammation of the most important organs and viscera, head-aches, faceaches, tooth-aches, ear-aches, and all the aches which the flesh is heir to; including sore throats, catarrhal affections, pleurisies, &c. may have their origin, at one time or other, traced to the influence, direct or indirect, of cold and moisture, or both united, applied to some part of the body. As a secret enemy, then, is more to be dreaded than an open and avowed adversary, cold requires a greater degree of vigilance to resist its effects, and more care to conduct it to a salutary crisis, than perhaps any other assailant, in the form of a disease: it takes us by surprise, sleeping or watching, without any premonitory intimation of its approach; and, not unfrequently, it leaves us in doubt both as to the manner and time of its operation, whilst its action involves the whole system, disturbing equally its structure and functions.

To the following history and treatment of Colds, will be found an account of the most usual causes of popular diseases, of the common methods usually taken before medical advice is called for, with plain directions, as regards particular cases, what ought to be done, either with a

view to check the progress of disease, or to treat it effectually and with safety. These causes, it will be seen, arise generally from colds, or some unnatural action of the body, as excessive labour, violent exercise, drinking cold fluids while the body is considerably above the standard temperature, sitting or lying down in cold damp places when very hot, exposure to currents or draughts of air, unwholesome food, changes of the weather, putrid or confined air, bad water, intemperance of various kinds, &c.

The precariousness of the health of old men, and the best means of preserving it; with an epitome of precepts relative to diet, confirmed by the experience and observation of some of the oldest and wisest physicians of times past and present; - the means of prolonging human life; —the management of the sick-room;—the pulse; -the use and abuse of various medicinal agents, as emetics, sudorifics, and purgatives, are considered and exemplified, with directions for their employment, in all cases where their utility is unequivocal, or where they ought to be rejected as hazardous and inexpedient. These being the leading subjects of the following pages, the inquisitive reader, desirous of being useful to himself, as well as others, may have nothing to regret from an attentive perusal of them. The principal subjects, though by no means new to the medical world, have, nevertheless, one essential advantage, which may recommend them to the medical-reading public; namely, that of having either been overlooked by the generality of writers on domestic medicine, or so confusedly and indistinctly noted, as scarcely to assign them a local habitation among less important details, the application of which is often rendered nugatory, and as frequently contradictory, by the anomalous assemblage of conflicting opinions, gathered from the practice of empirics.

CONTENTS.

	Page
CHAP. I.—INFLUENCE OF CLIMATE, &c	1
Warm Air	13
Cold Air	13
Damp or Moist Air	14
Dry and Cool Air	15
Sudden Transitions, &c	15
Influence of the different Winds	16
Seasons of the Year	17
Prognostics from the Weather	18
CHAP. II. Theory and Treatment of the affections usually	
denominated Colds	20
Theory of catching Cold	20
A Cold,—how produced	22
The Pituitary Membrane, -how affected by Cold	22
Manner in which Colds are caught—Coryza	23
Cure of Coryza	24
Sore Throat,—how produced	24
Inflammatory Quinsey,—how produced	25
A Cough,—how produced	25
A Blight, what,—and how produced	26
Swelled Face, &c	
Cold in the Neck	
Cold in the Ear	27
Cold in the Limbs and Body	28
Fever from Cold	
Cautions to be observed against catching Cold	29
Natural Treatment of Colds, &c	
CHAP. III.—Directions to Strangers how to avoid catch-	
ing cold in London, &c	. 31
CHAP. IV Means of Preserving Health and Prolonging	
Life	-
On the Precariousness of the Health of Old Men	
Directions to Old Men, equally applicable to those ad	
vanced in Years	

I I	age
CHAP. V.—Causes and Symptoms of popular diseases	51
CHAP. VI.—The causes which aggravate diseases, &c	61
Diseases in which Perspiration is beneficial	62
Cautions necessary to be observed in Vomiting and	
purging	64
CHAP. VII.—Symptoms, and means proper to be used at	
the beginning of Diseases	66
The Patient's Drink, &c	69
Regulation of the Bowels	69
The Patient's Bed	70
Directions to the sick on Recovering	70
CHAP. VIII.—The Sick-Room	72
Precautions to be used against Infection in the Sick-	
Room	73
CHAP. 1X.—An Epitome of Dietetical Precepts	74
Vegetables	76
Statical Experiments	77
Drinks	78
Mineral Waters	79
Tea Drinking	79
Exercise	
Sleep and Wakefulness	. 82
CHAP. X Selection and Use of Aperient Medicines	
Aloes	. 86
Calomel	. 88
Cases in which Calomel is beneficial	. 89
When Calomel is injurious	. 90
Colycinth, or Bitter Apple	
Elaterium, or Wild Cucumber	. 93
The Pulp of Cassia	. 93
Castor Oil	
Rhubarb	. 95
Jalap	97
Tamarinds	
Manna	99
Senna	99
Croton Oil	100

INFLUENCE OF CLIMATE, &c.

AS REGARDS THE

EFFECTS OF HEAT AND COLD, — DRYNESS AND MOISTURE,—ON THE HUMAN BODY, &c.

CHAPTER I.

It has been remarked by meteorologists, or those who observe and keep an account of the variety and changes of the weather, that the general range of the thermometer in England, at noon, in the shade, in cloudy or showery weather, is from sixty-six to seventy degrees. The highest degree of heat usually happens about two hours after the sun has passed the meridian, and the lowest degree of heat, or greatest cold, about one hour before the sun rises. The excess of cold, in winter, in this country, usually happens in January; and if a continued frost be accompanied with wind, the thermometer is seldom lower than twenty-seven or twenty-eight degrees; but in a calm night it will descend so low as eighteen degrees, and has been even so low as eight: but such instances as these rarely occur.

The Endemial disease, or the one most peculiar to this country, and which foreigners call our natural plague, is that of the pulmonary system, or consumption, supposed, as the nearest cause, to arise in consequence of sudden local inflammation, the result of previous torpor;—a

disease which assumes such varied appearances in different individuals, according to their respective constitutions, as to baffle the skill of the most experienced medical practitioners; and which, even under the most flattering symptoms, disappoints his hopes. This bane of youth, which makes such annual ravages among the finest and fairest part of the creation, has been observed to a most alarming extent within that period which has been assigned for the material change in the climate of Great Britain. This disease is usually preceded by what is termed a cold, an affection so prevalent during the humid months, and changes of the weather, as to be considered as a matter of course, and, because unavoidable, to merit little or no attention; and, if we consult people labouring under consumption, they invariably tell us that the first symptom they perceived of it, was owing to a cold, which was, as supposed, taken on some occasion or other.

A common cold, usually, if managed in a proper manner, ceases in a few days, and for the most part in less than ten; if it continue beyond this period, medical advice should always be taken, or consequences more or less serious may be expected; for, by a judicious mode of treatment at the commencement of the disease, thousands may be rescued from a premature grave.

The subsequent effects of cold, the febrile heat occasioned by previous torpor, as nervous cough, asthma, consumption, &c. have all been assigned to various causes; among others the disuse of wood fires, and the general adoption of mineral coal for fuel, at the present

time, has of itself been thought sufficient to account for it. But the great and sudden changes of temperature in our climate, are justly considered to be the cause of the frequency of such diseases among us; which are by no means so frequent among our neighbours: and there is much reason to suspect, that the warmth and closeness of our modern apartments, tend, not a little, to increase the susceptibility, and the consequent predisposition to these complaints.

In an economical point of view, as far as regards the saving of fuel, the ingenious contrivances of Count Romford and others, are certainly very efficacious for the purpose, as admitting a less frequent change of air in the room, by the exclusion of the external cold air; but, by keeping the air of our apartments so much warmer than the external air, we are not only more disposed to fall into a torpor or numbness on going into the open air; but, what is still more unfortunate, the increased action, occasioned by the newly-applied and increased stimulus, which consequently follows when we return to our apartments, increases any disposition for inflammation. is this evil less magnified by the new invented air-tight shades for sash-frames—air-tight shutters—sand-bags double-doors, with spring or elastic defensors,-all of which are calculated to isolate the persons within, by obstructing every stream of air, however small, from the general influence of the atmospheric air, to which we must frequently again be suddenly subject, with less power to resist the certain effects of such a change; must, whatever our admiration of genius, or love of novelty may dictate, all be condemned on the score of insalubrity.

On consulting history, we find that our ancestors were not so frequently subject to pulmonary complaints as we are at the present day, or to those arising from debility, -and they may be said to have almost lived in the open air; for, on examining old mansions, as well as houses of an inferior order, it may be remarked that the apertures of the chimnies were very large, and that the windows and doors were indifferently fitted; so that when a free-opening was made, the change of air in the apartment must have been very rapid. A thermometer placed in such a room, so that the direct rays of the fire might not fall upon the instrument, would stand but a few degrees higher than in the open air, owing to the easy communication between the air of the apartment, and the external air of the atmosphere; in consequence of the facility thus afforded for the transfusion and dissipation of heat: for transparent air is not heated by the rays of heat and light passing through it, but only in consequence of these rays heating the opaque bodies on which they fall; and these bodies again heating the air by reflecting the rays coming in contact with them.

It was by clothing that our ancestors contrived to keep themselves warm, and to resist the cold and damp. The general use of flannel, the wadded stuffs for petticoats, and worsted stuffs, or brocaded silks for gowns, used by the females of former times, formed a much more secure protection from moisture, and resisted the cold

infinitely better than the thin and transparent Grecianlike drapery of our modern elegantes. It also appears, by reference to old records, illustrated by family pictures, that the men, too, wore their clothes much more full, and of a thicker texture than those of the present day; and the costume of our chief magistrates, the fashion of which has perhaps not varied much for centuries past, seems well calculated for preserving warmth, as well as impressing the idea of dignity. The thick woollen dresses of the monks were admirable contrivances for maintaining a due temperature in the heat of their bodies, no part but the face being exposed to the external air; and this was again protected by the cowl, which well defended them from currents of air, at vespers or early matins, during midnight, through the cold cloisters and vaulted aisles of monastic fabrics. To preserve themselves also from the effects of the currents of air, which necessarily pressed towards the fire-places, our ancestors had recourse to the use of wooden screens or other fences, impervious to the air, placed behind their seats. Such contrivances are still in use, in many large farm-houses and country inns, where the seat and fence generally constitute pieces of ornamental furniture; and notwithstanding the refined taste of the present day, of the comfort as well as the utility of such rather antiquated furniture, there can be little doubt: as round a large open fire in the winter time, by these means, they were kept warm by the direct rays of the fire falling upon their persons, while the air they breathed was little heated, owing to the rapid change

affected by the ascending column of colder air over the upper part of the screen. Their lungs, therefore, did not receive such a sudden attack from the cold, when they went into the open air, as ours do from our close-carpetted rooms.

Cold and humid weather is prejudicial to every constitution; and after heavy rains the exhalations that are produced give rise to many diseases both in this and other climates. In Egypt, the plague is said to be most frequent after the inundation of the Nile: the consequence of the slimy mud which is left from the overflowing of its banks, occasions a humid mephitic exhalation to arise, which is supposed to generate the contagion; and from the account of the diseases in Egypt, there is great reason to believe, that a humid state of the atmosphere is favourable to the production of this dreadful malady *; for the English and Turkish armies which marched to Cairo, escaped contagion, notwithstanding almost every village was infected; while the troops which remained stationary on the moist shores of Aboukir, were severely afflicted, and lost one hundred and seventy-three persons.

A dry atmosphere appears not only to be a preventive of plague, but also to afford a remedy; for we are told that several men, confined with this disorder in the hospital at Jaffa, escaped into the desert, and endeavoured to reach the army; but, finding the attempt impracticable, returned in three days perfectly recovered.

^{*} See Sir Robert Wilson's Travels in Egypt.

The effects of a dry climate, although attended with extreme heat, is no where more conspicuous than among the wandering Arab-tribes, who spend the greater part of their time in traversing arid and sandy deserts; where, perhaps, no men, to a higher degree, are more possessed of sound health both in body and mind: and they endure fatigue and privations of aliment with little apparent inconvenience. Now the usual effects produced by a warm climate are the very reverse; the body and mind generally are disposed to debility, as well as lose their activity, and sink into indolence and effeminacy. This exception of the Arabs, then, from similar visitations, can only be attributed to a greater purity of atmosphere, as there does not appear to be any other physical cause.

The quantity of aqueous particles that is dissolved in the air which we are constantly respiring, must doubtless have considerable influence over our constitutions; for in addition to the decomposed air, which takes place in the act of respiration, there is much reason to believe, that a process of aqueous moisture, similar to that from the leaves of vegetables, is likewise going forwards; as it is observed, that those unfortunate persons who have been deprived of food and liquids, when shipwrecked, or buried in coal mines, have always complained of intolerable thirst; and on throwing our breath on a cold plate of glass, or on a smooth surface of metal, a deposition of moisture is always observed, which appears to be taken up from the moist surface of the lungs; for instance, if the pipe of a pair of bellows be heated in the fire, and air afterwards made to pass through the pipe on cold metal

or glass, no moisture under these circumstances will be deposited: and as the atmosphere we breathe is occasionally varying with respect to dryness and moisture, we must be liable, if our lungs excrete aqueous moisture, like the leaves or vegetables, to experience a change of health, agreeable to the variations of the atmosphere.

The circumstances which favour this idea are, a very sensible effect experienced by these variations on our state of body; for when the wind blows from an easterly or northerly direction, with a dry state of the atmosphere, we feel alert and strong; but if it suddenly change to the south-west, a warm close air, saturated with moisture, is soon brought to us from that quarter; at which time a much less quantity of aqueous fluid is taken up from the surface of the lungs; the blood-vessels consequently become turgid, and the vital fluid is probably rendered less stimulant; we feel oppressed with a sense of fulness, particularly about the head, which sometimes is affected with giddiness and languor, and invariably with some degree of weakness. By going into a conservatory, when the air is dry, and the wind northerly, or easterly in the spring, where the air is raised eight or ten degrees above the external temperature, this sensation may at any time be artificially felt, particularly if there be a number of luxuriant vegetables, or if the floor be kept moist, or a portion of steam be let loose, the sense of fulness about the head may then be experienced; but if we put our heads out at the window, or introduce a tube, connected with external atmosphere, so as to breathe the unconfined air, this unpleasant sensation subsides, although the rest of the body is exposed to the warm humid air.

It might be imagined, that an excessively dry atmosphere would be extremely injurious to health, animal or vegetable; but it seems to disorder the economy of the latter much sooner than the former. A wind of this kind, called the Harmattan, is not unfrequently met with on the western coast of Africa, between the equator and fifteen degrees of northern latitude, blowing from the north-east towards the Atlantic ocean; consequently it must pass over an extensive space of very arid and sultry land. Mr. Norris, in the Philosophical Transactions*, gives the following account of this wind. "A fog or haze always accompanies this wind with extreme dryness; so that vegetables of every kind are very much injured, and all tender plants; and most productions of the garden are destroyed. Although this wind is so very prejudicial to vegetable life, yet it is highly conducive to health. Those labouring under fluxes and intermitting fevers, generally recover during the blowing of the Harmattan: and those weakened by fevers, and sinking under evacuations for the cure of them, particularly bleeding, which is often injudiciously repeated, have their lives saved and vigour restored. It stops the progress of epidemics; the small-pox, remittent fever, &c. not only disappear, but those labouring under these diseases, when an Harmattan comes on, are almost cer-

^{*} Vol 71.

tain of a speedy recovery: infection appears not then to be easily communicated, even by art."

This difficulty of communicating infection to animals during a dry state of the atmosphere, as remarked on the western coast of Africa, during the harmattan wind, is perfectly in unison with the observations made on the plague by the French physicians,—a disease which first appeared in the French army, during a moist state of the atmosphere, in Syria, when the army lay under the walls of Jaffa, in February 1800. And it was remarked by M. Assalini, that the attendants in the hospital at Smyrna rarely took the infection, if they avoided the breath of the infected persons*. Hence it might not be irrational to suppose, that the contagious effluvia of plague and other infectious complaints is combined with the aqueous or watery particles of the atmosphere, and thus conveyed from one person to another. And, in corroboration of this hypothesis, it is tolerably well known, that the scent of flowers and other odoriferous substances, is most perceptible when the atmosphere is bumid, during the fall of the evening dew; and the putrid effluvia of ditches, common sewers, and animal and vegetable substances in a state of decomposition, are conveyed to the olfactory nerves, or sense of smelling, much more speedily in summer, previous to rain, when the air is moist, than in winter.

^{*} See Assalini's Observations on the Plague.

The reason why vegetable substances are much more susceptible of injury than animal matters, during a very dry state of the atmosphere, proceeds from their tardy absorption of moisture by the roots, to supply their profuse perspiration. Hence it is observed, that the leaves of cucumbers and melons, which had the organization of their leaves carried to the utmost extent, for want of sun and ventilation, by being planted in hotbeds and glass-frames, if they are suddenly exposed to the sun and open air, the exhalation becomes greater than the roots can support, and the vessels being thus emptied, the plants become flaccid, wither, and die; but vegetables of a similar description, which have been reared in the open air, do not extend their organization so far; consequently the leaves, being of smaller dimensions, suffer but little inconvenience from such transitions, more especially if there has not been much previous cloudy weather: but if, after a long cloudy season, the sun suddenly breaks out in the middle of the day, then the roots of potatoes, cabbages, and other vegetables fade, like melon and cucumber plants reared in frames, when suddenly exposed to the influence of the sun and air*.

^{*} The appearance of the Acarus, or red spider, so frequently destructive to hop plantations, graperies, and melon frames, is to be attributed to the above cause, which produces a disease on the leaf by thickening the juice or sap of the vessels, which obstructs the circulation. Thus various vegetables, in our climate, by the too powerful action of light and heat, are often materially injured;

Having thus comparatively shown the different effects of a dry and moist atmosphere on the human frame, it would appear that we have little cause, if we attend to circumstances and conveniences, for apprehending dangerous consequences to our health. An attentive consideration of the influence of heat and cold, dryness and moisture on the animal economy, would not only prevent but remedy many of the most troublesome, and often fatal affections with which the human frame is visited. A timely attention to simple complaints often cuts them short at once, and prevents them from degenerating into those of a more alarming type. And an artificial atmosphere, corresponding to dryness and warmth, whenever it may be deemed of importance to produce it, may always, even in the most inclement season, be substituted for a natural one of this description, by confinement in a well ventilated room, where a good and equable fire is kept up, and by attention to clothing, &c.

As the origin and effects of nearly all diseases in this country are attributed to cold, and as the direct influence of this impression on various parts of the body is much

and that too at a time when the hydrometer does not indicate any extraordinary aridity of the air; but the extended surface of the eaf, the accumulated excitability of the plant, during the previous cool and clouded state of the atmosphere, occasions a more copious exhaustion of humidity in the leaves and tender shoots, on the sun thus suddenly bursting forth, than the plants are enabled to support.

more talked about than understood, even by the majority of the less informed portion of the profession, independent of the effects of this influential cause being of the most frequent occurrence, as well as, notwithstanding its apparent simplicity and intelligibility, the least satisfactorily explained by writers on what is now popularly ycleped "Domestic Medicine," the following observations are presented to the votaries of health, to guard them against the insidious and multilocal attacks of this general enemy of mankind. Before, however, we proceed to the consideration of the theory and treatment of colds, it may not be out of place to add the following observations, in addition to the preceding, relative to the influence of air, and the vicissitudes of the weather, as affecting different constitutions.

WARM AIR.—Heat is chiefly oppressive to the nerves, in consequence of which, the delicate and infirm suffer severely in hot weather; and it is during the existence of an exalted temperature that hysterical and hypochondriacal complaints, convulsions, and diarrhœas, are most prevalent. Warm air relaxes the solid parts of the body, and accelerates the circulation of the fluids.

Cold Air.—Cold renders bodies more compact, particularly the solid parts of the animal structure, as the bones, muscles, nerves, &c. In winter these become more elastic, the appetite for food is stronger, and digestion is carried on more easily and quicker. On

the contrary, if the cold be too intense, the resistance of the fluids becomes so great, that even the increased power of the solids cannot overcome it. The blood in winter is much disposed to influence inflammations—hence stitches in the side, inflammatory sore throats, rheumatism, &c. With people who use little exercise the fluids are apt to stagnate, and the solids to chill, during the winter season; still, on the whole, the effects of cold weather may be rendered less hurtful, nay, even salutary to the body, if the necessary degree of exercise be not overlooked.

DAMP OR MOIST AIR.—The moisture of the atmospheric air suddenly relaxes and debilitates, and occasions a tardiness in the circulation of the fluids that gives rise to stagnations, which impede the circulation of the blood, the secretion of humours, &c. by checking the insensible perspiration. If the moisture of the atmosphere increases, an unaccountable torpor and lassitude supervene, the mind becomes sensibly depressed, and with the loss of energy, which accompanies such a state, we lose that cheerfulness which characterises the mind under different and more agreeable impressions.

Damp places and districts, particularly in cold weather, are always unhealthy. Moisture, by diminishing perspiration, is productive of disorders of the throat, chest, and abdomen. The moist night air of hot climates, and after hot summer days, is no less pernicious. But still more dangerous and fatal effects on the human body have

been observed to originate in moist air, accompanied with sultry weather; for, when moisture impairs the energy of the body, heat does so in a much greater degree, by relaxing the pores of the skin, through which the moisture penetrates, giving to every part of the body a predisposition to putrefaction and dissolution; and this accounts for the great mortality that prevails during the wet season in some of the West India islands.

DRY AND COOL AIR.—In consequence of dry and cool air possessing a sufficient degree of elasticity, it promotes, in an extraordinary degree, the serenity and agility of both mind and body; hence its decided benefit to hypochondriacs, or those labouring under depression of spirits from various causes. But a dry and very cold air generates inflammatory disorders, by thickening the blood. Dry and hot air affects us like heat, and enervates the body; and a dry air, which is not too warm, is both healthy and agreeable.

Sudden Transitions, &c.—Great and hasty transitions from a warm to a cold, or from a light to a heavy air, are highly injurious to valetudinarians, as well as to those in a state of health. Travellers, soldiers in camps, sailors, &c. feel often very severely the bad effects of cold and moist night air, after long marches, journeys, and watchings. Infirm and weakly people frequently experience ominous sensations previous to any remarkable changes of the air.

A moderately heavy and elastic air is the most salutary,

as well as the most agreeable to the human body; hence the reason we are not assigned by nature to reside constantly on the tops of mountains. A light and rarified air, is, nevertheless, not so ill adapted for respiration, nor does it manifest an influence so prejudicial to the human frame as was formerly imagined.

Influence of the different Winds.—Among the different winds, which are but the air put violently in motion, the long continued North Wind is comparatively the most healthy: it purifies the air of noxious vapours, renders the air serene and dry, and hence it imparts elasticity, vigour, activity, and a lively colour to the countenance. To persons, however, of a delicate constitution, it proves frequently troublesome, as it occasions coughs, inflammation of the throat, pain in the side, and febrile diseases.

The South Wind is apt to weaken and relax the body, and to produce, in consequence, catarrhal affections *.

The morning wind is very drying, but that of the evening cool and moist, being generally accompanied with rain and variable weather.

All these winds differ very materially in their quali-

^{*} Catarrh: there are, according to Cullen, two species of this disease, viz. the common cold, and the influenza. It is caused by cold to the body, however applied: contagion, and consequent inflammation, with an increased afflux of fluids to the mucous membrane, lining the nose, fauces, and air-cells of the lungs.

ties, from local circumstances, and accordingly as they blow over a continent, the ocean, or over high mountains and icy regions, from which they carry along with them more or less of cold and humid particles. Every thing considered, too dry weather is always more healthy than that which is too moist, and these are more or less influenced by the

Seasons of the Year.—Autumn is considered as the most unhealthy of the four seasons of the year; because the particles of perspiration are retained in the body in a state disposing to putrefaction. This, however, may be remedied, in a great measure, by protecting the body with proper cloathing, and selecting a suitable diet. A dress too light, with too thin stockings, are not adviseable at this season of the year.

Spring and the beginning of summer are most salu tary to children and young people; while the summer and the beginning of autumn agree best with those advanced in years. The latter end of autumn and the succeeding winter, are commonly the most healthy seasons to middle aged people.

It has been remarked by physicians that certain disorders appear and disappear according to the different seasons of the year. For instance, putrid and bilious disorders are most prevalent in summer, inflammatory diseases in winter; and the catarrhal mucous, and gastric or stomach affections in spring and autumn. Also, that in spring the blood usually circulates more freely;

hence, in all probability, originated the ancient practice of bleeding and purging at certain regular periods, a practice not wholly divested of danger, where it is not absolutely called for, and one always hurtful to people in health, who ought to be satisfied to remain so.

From the natural circumstance of the vegetable kingdom being renewed in spring, and vegetation, at this season of the year, being more lively and inviting, there can be little doubt that the pure vital air is then more abundantly evolved by means of the influence of the sun. Hence it follows, that the vernal air is more salubrious than the autumnal, which abounds with corrupted and highly putrescent particles. The cold of autumn, nevertheless, and the frequent winds prevailing at this time, are not without their use, inasmuch as they prove efficacious agents in counteracting the baneful effects of corruption and putridity.

Prognostics from the Weather.—If the temperature of the air corresponds with the natural constitution of the season, what is called a healthy year may be anticipated, and the usually prevailing diseases will be of a mild nature; but should the weather not correspond with the general laws of the season, that is, if the winter proves warm, or at least moderate,—or the spring cold and severe, with sudden alternations of heat, then we may expect the year to be strongly characterized with serious and obstinate diseases. The natural situation of the country will go considerably to affect the temperature of

the air, in proportion as it may be an elevated or a low one—whether it contains flowing or stagnated waters, or morasses; or whether it be open or covered with wood.

Upon the whole, country air is always much purer than that of large towns, narrow streets, and crowded buildings. The air of alleys, courts, and confined premises is always unwholesome, and the ground floor more so than the second,—and the second, in equal proportion, more so than the third. So many disorders arise from an impure and confined atmosphere and want of cleanliness, that it is matter of surprise more attention is not paid as regards these particulars to the public health. A greater number still are a consequence of sudden changes in the temperature of the air we are in the habit of breathing. Hence the necessity of exposing ourselves daily to such changes, as well as of renewing the air of the house generally in which we live, as well as that of each apartment separately, by opening the doors and windows every dry and clear morning, or as often as may be convenient during the day.

Cold weather, in fact, however intense, has the effect of bracing the fibres of the system, and is attended with danger only when we remove to a warmer temperature. On this account, it is extremely injudicious, and a bad compliment paid to a visitor, to invite him, at first entering, to approach the fire; for we should indeed consult his welfare much better by conducting him into a cold room, or rather by placing him in a situation at some distance from the fire, until the temperature of the body

became more on an equilibrium with that of the apartment*. Thus far, on general principles, we shall now consider the theory and treatment of colds, and those parts most liable to be affected by atmospheric influence, &c.

CHAPTER II.

THEORY AND TREATMENT OF THE AFFECTIONS USUALLY DENOMINATED COLDS.

These affections prevail during every season of the year, and there are constitutions more predisposed to them than others; at the same time, there is no distemper so little known, or more frequent, than that now under examination—namely, a cold. It affects a person in various ways, sometimes attacking one place, as the head,—sometimes another, as the throat, nose, &c.

Theory of Catching Cold.—The matter which perspires from the human body is not excrementitious, but the result of the last and most perfect concoction of the animal juices; it is what remains of the alimentary substances received into the stomach, after they have gone through the whole course of gradual transmutation, and are purified from all excrementitious particles, and it is designed for the immediate nourishment and repair of the body in all its parts. This juice therefore permeates, or passes through every part of the body, and so much of

^{*} See Natural and Medical Dieteticon, &c. p. 23, &c.

it only as is redundant or superfluous, passes off through the pores or excretory ducts.

But the pores and excretory ducts, through which the superfluity of this juice passes, are not those only of the skin, but of the membranes that cover and line the stomach, bowels, and every other internal part of the body, so that all the surfaces of the body, inward and outward, are in a perpetual state of perspiration, by which they are kept moist and supple, and prevented both from adhering, and from suffering a painful irritation by rubbing against each other. This juice, as well as others of the body, when first secreted from the capillary arteries, is heated, and therefore in a thin fluid state; but afterwards it grows thicker from various causes, particularly from remaining at rest in its several receptacles, and from a dissipation or absorption of its watery particles. It may be rendered thick and tenacious by natural and supernatural causes; and one species of tenacity will be salutary and necessary, the other hurtful and dangerous. is rendered thick and tenacious, and becomes the glandular mucus of the nose and mouth, and of all the canals where such a humour is necessary to defend their internal surface against acrid and stimulating particles, by a natural course, and therefore is salutary and necessary. It is rendered thick and tenacious also by a preternatural chill in its secretory or excretory ducts; and by a corrugation or spasmodic construction of the ducts themselves; it then puts a stop to the natural secretions and absorptions, consequently to the free circulation of the

humours through the capillaries, which therefore extend and load the compound organs on which the affection falls; and in this case the inspissated perceptible matter forms the tenacious substance that appears upon the surface of the blood, which is taken from persons who are disordered, in consequence of neglected colds, and which is called size: the same matter, thus morbidly inspissated, also forms the tough membranes and adhesions of the lungs with the pleura, after perepneumonies and pleurisies, as well as all other adhesions after inflammatory disorders of different parts.

A Cold,—How produced.—This morbid inspissation of the perspirable matter from a chill in some internal or external part, produces, therefore, the disease called a cold; and when it falls on the pituitary membrane, which is most subject to this accident, the most immediate and remarkable symptoms of the disease are produced.

The Pituitary Membrane,—how affected by a cold, the capillary vessels, and ducts of the glands, are obstructed, which produces an undue fullness and distention of the vessels, with a constriction of the membrane, a stimulation of the nerves, and, at last, an immoderate distillation and efflux of humour; or, in common language, the head is 'stuffed up,' the party sneezes, and the nose runs. All these are frequently occasioned by breathing cold air, and forms a disorder, formerly called

a catarrh, and erroneously supposed to be derived from the brain.

As the blood vessels, which are spread over the pituitous membrane, communicate with each other, and are derived from different trunks, the obstruction sometimes shifts from one point to another; the discharge from the nostrils will cease, and a hoarseness or cough come on, and vice versa.

That part of the body on which cold is taken, or on which the perspirable matter is morbidly thickened by a chill, will first suffer, and shew the first signs of the disorder, which originally is confined to one spot.

MANNER IN WHICH COLDS ARE CAUGHT—CORYZA.— It is common for persons coming out of a very warm room into the open air, with the whole body heated inside and out, and the perspiration every where increased, to wrap themselves up, so as to prevent a chill on the surface of the body; but it is also as common to take no precaution for the defence of the passages by which we breathe; such persons, therefore, breathe a cold damp air, which is repeatedly drawn up the nostrils; thus they take cold, which immediately affects the petuitary membrane: in about twelve hours the head is stuffed, with difficulty of breathing through the nose, loss of smell, frequent sneezing, a distillation of thin humour from the nose, and a heaviness or pain in the forehead. If proper care be taken, the humour will flow more readily and plentifully; in five or six days it will begin to thicken, and at last become concocted mucus; the

sneezing, and pain in the forehead go off, the discharge of thick mucus gradually diminishes, and health is perfectly restored.

This species of cold is called a coryza, and is a mere local affection of that part of the pituitary membrane, which is spread over the nostrils and frontal sinuses. It is, however, sometimes produced by a more general check of the perspiration, from wet linen, or damp beds; for this check will cause a superabundance of the perspirable matter, by repelling what should have been thrown off, and nature will ease herself of the superfluity, where the readiest outlet is to be found, which, from some predisposing causes, may happen to be this emunctory.

Cure of Coryza.—To facilitate the cure of this species of cold, it is often necessary to take away blood, and to empty the bowels by gentle aperients, in order to ease the pituitary membrane of that load and tension, which would otherwise be too great for the elasticity of the vessels to overcome; and which, therefore, might multiply the obstructions, break the vessels, inflame the membrane, and produce a fever.

Sore Throat,—How produced.—If cold damp air, received into the mouth, affects that part of the pituitary membrane, which lines the mouth and throat, the palate, the uvula, or the tonsils, these parts will then become the seat of the *cold*; the tonsils and uvula will swell, a difficulty of swallowing and discharging the viscid phlegm,

with which the parts are loaded, will come on, and the disorder is then distinguished by the name of sore throat.

The sore throat is sometimes cured like the coryza, by resolution, relaxation, or a discharge of mucus, and sometimes by suppuration and purulent discharge. It sometimes also happens, but never without ill-treatment, that the tonsils remain enlarged and indurated, which may produce bad consequences; and, if the chill happens between the tonsils, and affects the protuberant mouth of either of the Eustachian tubes, it will occasion an acute pain, stretching into the ear, especially in the act of swallowing; a circumstance which ought always to be attended to, lest the obstruction should extend inward, and inflame the tympanum, or drum of the ear.

Inflammatory Quinsey,—how produced.—If the chill attacks the Epiglattes, and upper part of the larynx, a hoarseness or loss of voice follows; if it penetrates deeper into the glottes, a difficulty of breathing will be added; if the muscles of the larynx are chilled and stiffened, this difficulty will increase; and if the circulation of the blood there should be obstructed to a greater degree, through neglect or ill-treatment, a tumour and inflammation will arise, and a true inflammatory quinsey will be produced, one of the most immediately dangerous of all diseases.

A Cough,—how produced.—When the chill falls upon the trachea or windpipe, it produces an effort to pump up

and throw off the viscid obstructing mucus, which effort is called a cough. A cough is cured, like every other species of cold, by a resolution of the obstructions in the capillaries, by an easy expectoration, and by a recovery of strength in the solid parts that are affected, but great care must be taken not to use provocative expectorants, for they always do harm, and are always fatal.

Any of these species of cold, the coryza, the sorethroat, and the cough, may happen separately, and all conjointly, without affecting the trunk, limbs, viscera, or general habit of the body; but when they are not soon relieved by nature or art, they lay the first foundation of dangerous local inflammation, particularly in the head and lungs, and of fevers of the whole habit.

A BLIGHT, WHAT,—AND HOW PRODUCED.—If a cold stream of air be received on any part of the integuments in the vicinity of the eyes, it produces that species of cold called a blight. This affection generally goes off easily with proper care, but if neglected, sometimes degenerates into erysepelas, or St. Anthony's fire. A cold wind, driving upon the inside of the eyelid, or the tunica adnata of the eye itself, will sometimes cause an acute pain, like that occasioned by sand or grit getting into the eye; this usually goes off in a short time, by keeping the eye shut, and frequently applying the warm hand to it, but will sometimes cause a suffusion of red over the whole white of the eye, with great heat and pain. This disorder should be immediately and carefully attended to. Con-

finement, repose, exclusion from light and air, abstinence, proper evacuations, and mild applications, are necessary to prevent the most terrible mischiefs; and all cold styptic-eye-washes must be avoided, as pernicious in the highest degree.

Swelled Face, &c.—If a current of damp cold air falls upon the lower part of the face, the integuments will be inflated from ear to ear, and the lips and nostrils become swelled and hard. This disorder is called a swelled face, and, if neglected, the swelling sometimes suppurates, and breaks either inwardly or outwardly, with very disagreeable circumstances.

Cold in the Neck.—When the chill falls on the neck, the glands swell and harden, and then the complaint is called kernels; sometimes by stiffening the muscles of the neck, it produces what is called a creak. Sometimes it renders the muscles both of the head and arms rigid; and this rigidity, if it meets with any idiosyncrasy of the habit, is apt to degenerate into a species of tetanus or spasm, followed by convulsions and death.

COLD IN THE EAR.—If the chilling stroke is received on one or both ears, the wax is rendered too thick, and then, by obstructing the passage, it dulls the hearing. If the blood in the vessels of these organs be chilled, a painful tumour will follow, which, if neglected, or ill-managed, by hot acrid stimulating applications, it will

probably terminate in inflammation, imposthumations, watchings, delirium, convulsions, swoonings, and death. The structure of the ear is so extremely delicate, its parts so numerous, its vessels so minute, its investing membranes so exquisitely thin, and its connexions so important, that no rash empirical practices should ever be tried upon it.

Cold in the Limbs and Body.—If the cold current air strike the whole trunk and limbs of the body, as is frequently the case, by going warm on the river, sitting in damp rooms, going too thinly clad, or continuing up too late at night without a fire, the whole body will be thrown into a spasmodic shivering, the first, and most usual sign of this species of a cold, which, if not immediately attended to, is a certain prelude to a fever, if it be not a fever already set in.

FEVER FROM COLD.—It sometimes happens, that when a cold is taken, a gentle fever supervenes, attended with no other complaint than a slight pain, stretching in a strait line upon the head, in the direction of the longitudinal sinus, the sleep is interrupted suddenly by unusual, though not by confused or frightful dreams, and in this state the disorder will continue for several days, without alarming the patient by any violent symptoms. It should, however, be remembered, that in this situation the patient is in the most imminent danger, and that if he is not relieved by the most skilful assistance, a deli-

rium will soon come on, by paroxysms, which, at length, will become continued, or attended by alternate stupors, and end in convulsions and death.

It is of the utmost importance, on the first approach of a fever, from cold, to take to a warm bed, to use abstinence, diluting liquors, and some appropriate evacuations, as adapted to the nature of the case, which will almost always carry it off in a short time; the danger arises from delay; for a fever, though easily guided at the beginning, will often baffle the most judicious remedies, administered with the greatest sagacity, when it has been permitted to advance without any attempt to cut it short.

CAUTIONS TO BE OBSERVED AGAINST CATCHING COLD.— When the body is in a state of preternatural heat, the air is always of itself sufficient to produce an obstructed and inspissated perspiration; for, as regards the body thus heated, the air is always cold. We should never, therefore, expose ourselves, in a state of rest, to the air, when we are hotter than common clothing, without artificial heat or exercise will make us, nor should we ever accustom ourselves to sit in a room more than temperately warm, nor to sit near a fire, much less to hover over it. We should never go very warm into the cold, but wait till the state of the body is nearer to that of the air into which we are going. All currents of air are to be avoided. And in going out of a theatre, in cold weather, some additional garment should always be put on; and never to forget to guard the mouth and nostrils with a handkerchief or muff, against the passage of a cold air into the nostrils, throat, and windpipe.

In cold weather, it is dangerous and injudicious for weakly people, or those recovering from diseases, to go to church. In wet or damp weather, whether hot or cold, it is adviseable to have a fire in the rooms where we sit or sleep. Our clothing should always be increased in proportion to the coldness of the weather.

Luxurious meals are predisposing causes of disorders arising from colds, as they render persons more liable to take cold, by producing preternatural heat, and a full habit of body.

NATURAL TREATMENT OF COLDS, &c.—On the first symptoms of a cold, the best practice is to go immediately to a warm bed, in a dry warm room, to observe strict abstinence, and drink warm diluting liquors, such as may promote and keep up a moderate degree of perspiration, till the symptoms disappear; then dress in warm clothing, and keep to the house for 24 hours. By this method colds and the fevers they produce, so fatal when fixed by delay, will seldom fail of being removed: but heating liquors and medicines, we again repeat, so often and absurdly administered on this occasion, ought to be scrupulously avoided.

CHAPTER III.

DIRECTIONS TO STRANGERS HOW TO AVOID CATCHING COLD IN LONDON, &c.

It is frequently remarked, that persons on their return from the country, towards the latter end of autumn, to this great metropolis, are shortly afterwards affected by colds, without having experienced the smallest symptom of any such complaint during their stay in the country; or without any alteration of weather, after their arrival in town; a circumstance which people thus affected are apt to wonder at, as they take it for granted that the air in general must be warmer in town than in the country; both from the numberless buildings which inclose it, as from the multitude of fires constantly kept up by the inhabitants. But this, although true, yet is, accidentally, the very cause of the complaint.

The whole body of the atmosphere, in town, is constantly in a state of preternatural rarefaction; consequently, the cooler and more condensed air of the country, must be perpetually rushing, as into a vacuum, from all sides, creating an artificial wind: moreover, the buildings, erected in all directions, are so many impediments to the free current of the air, which is reverberated and circulated through the streets, lanes, courts, and alleys, and from church-yards and other wide openings, occasioning so many streams and eddies of wind, which not only meet persons without doors, in almost every possible position, but also encounter them in the passages

and stair-cases of their own houses, and drive through every aperture and crevice of the chamber they reside in; and this happens under the disadvantageous circumstance of the body being more warmed, and perspiration more increased by the greater positive warmth of the atmosphere; which, until they are settled and accommodated to their changed situation, by some longer stay, naturally expose them to the very conveniences they complain of; to avoid which, all weakly persons, and others subject to catch cold, and also young children, should be used to practice every precaution mentioned, relative to such accidents, upon their first essays to go or to be carried abroad.

The greatest care and caution are necessary to guard against the effects of cold; and people, old and young, should be admonished not to frequent damp uninhabited rooms, or delaying on passages or staircases; and children should be restrained from playing about such dangerous places, especially in damp weather, or after the houses have been washed; both which, from certain stated punctualities of cleanliness observed in this country, or to gratify female nicety, frequently happen together, and give rise to hoarseness, sore throats, coughs, and fevers.

It is very hard that the more orderly part of our species should be most of all exposed to mischief of this sort, than when occupied in some bodily exercise; consequently it should be treated as a matter of no little importance by those whom it respectively concerns, to well consider this

matter, as regards the washing places of public resort, as churches, halls, &c.; nor ought people in cold and moist weather, to be so lavish of water about their floors and furniture; as all those places and articles are rendered safer by being kept more free from that rawness and dampness, which must necessarily follow such customs, however, at proper seasons and times, they may otherwise be commendable, on the score of cleanliness.

These remarks are equally applicable to coaches and carriages, which should, when not in actual use, be kept secure from the rain and damp of the atmosphere, in proper conveniences for that purpose, nor would it be an unimportant piece of advice, were these vehicles to be frequently aired in winter time, by means of a proper apparatus, duly watched, in which a certain quantity of ignited charcoal or coke, might be entertained for a sufficient length of time; for the purpose of carrying off the moisture absorbed and contained in the cushions and linings; which might be attracted towards the system by means of the natural heat of the body; which in delicate constitutions would be cause sufficient to produce a serious affection, if not otherwise obviated.

Whatever may be the season of the year, if the weather be rainy or moist, a moderate fire should be kept up in every inhabited room, more especially during the evening and night time; as well as in those places where persons follow their ordinary avocations, either in their studies or counting-houses.

It is also prudent to have a fire kept up in every room set apart for dining, retiring, or for natural rest, after they have been washed, as it prevents the damp vapours, which arise while it is drying, from ascending and bedewing the ceiling, fixing in drops on the furniture, and trickling down the wainscoting; or from hovering about the room, by absorbing or directing their course up the chimney; moreover, all such rooms should be thoroughly dry before delicate persons venture to sit, stand, and above all, to sleep in them; as they will be more liable to receive injury from these conditions not being attended to, when they are warmed, and in a state of perspiration, by exercise of any kind; or, after having been in a warm situation, either from the influence of the rays of the sun, or a common fire, or when heated by any degree of intemperance occasioned by meats or wine.

Many of these, apparently fastidious cautions, may seem superfluous to persons enjoying robust health, and even these are not exempted, but to the delicate and debilitated, they are of too much consequence to be overlooked.

CHAPTER IV.

MEANS OF PRESERVING HEALTH AND PROLONGING LIFE.

As the enjoyment of health is the greatest blessing mortals can enjoy, and the source of every pleasure, to explore the regions where it grows, the springs that feed it, and the customs and methods by which it is best cultivated and preserved, are objects as gratifying to the mind, as they are meritorious in the pursuit. For this purpose, the first consideration will be to attend to the examples or instances we meet with of health and long life, and what it may be considered as a consequence of; and to observe the places, customs, and conditions of those who enjoyed them in any extraordinary degree; by which means we shall be better enabled to ascertain the causes, and draw the fairest conclusions.

Relative to what passed before the flood, we know little from scripture, except the length of antidiluvian life; although it is imagined by some, that at that period men neither used animal food nor drank wine; for it appears that it was to Noah the first privilege of feeding upon living creatures was given, as well as the prerogative of planting the vine. Since that time we meet with comparatively few instances of extraordinary longevity, either in sacred or prophane history, with the exception of the patriarchs of the Hebrews, the Brachmans, among the old Indians, and the Brazilians, at the time that country was first discovered by the Europeans. Many of these are said to have lived to two or three hundred years. The same terms of life are attributed to the ancient Brachmans; and those of the patriarchs are recorded in scripture history. As regards these, it may be observed that the patriarchs did not dwell in cities but in open countries and fields; that they led a pastoral life, or employed themselves in agricultural labours; that they were of the same race, to which their marriages were generally confined; that their diet was simple as that of the ancients is generally represented, among whom animal food and wine seldom constituted a part, except at sacrifices or solemn feasts.

The Brachmans were all of the same race; they lived in fields and woods after they had finished their course of studies, and fed only on rice, milk, or herbs.

The Brazilians, when first discovered, lived the most natural and original life of mankind, so frequently described in ancient countries, before either laws, property, or arts made their appearance among them; hence these customs may be concluded to have been still more simple than those of either of the other two. They lived without business or labour, further than was necessary to procure them the means of subsistence, by gathering fruits, herbs, and plants; water was their only drink: they were not tempted to drink beyond common thirst, nor to eat but with a natural appetite; they were troubled with neither public nor domestic cares; nor did they know any pleasures but those of the most simple and natural kind.

From such examples and customs it may probably be inferred, that the common ingredients of health and long life, with the exception of congenital infirmities, are strict temperance, pure, open air, easy labour, little care, simplicity of diet, fruits and herbs, in preference to animal food, which easier corrupts; and water, which preserves the radical moisture, without increasing too much the natural heat; whereas sickness, decay, and death commonly proceed from the one preying too fast upon the other, and at length wholly extinguishing it.

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"that the regions of so much health and so long lives, were all under very hot climates; whereas the more temperate are allowed to produce the strongest and most vigorous bodies. But weaker constitutions may last as long as the strong, if better preserved from accidents: so Venice glass, as long as an earthen pitcher, if carefully kept: and for one life that ends by mere decay of nature or age, millions are intercepted by accidents from without or diseases within; by untimely deaths or decays from the effects of excess and luxury, immoderate repletion or exercise, the preying of our minds upon our bodies by long passions or consuming cares, as well as those accidents which are called violent."

It is possible that men may be betrayed into all these dangers by a naturally strong and vigorous constitution, by more appetite and larger fare, in colder climates. In warm countries excesses of every kind are more pernicious to health, and so more avoided; and if experience and reflection do not promote temperance among them, it is forced upon them by the faintness of appetite.

Sir Francis Bacon tells a story of a very old man whose customs and manner of living he inquired into; but he said he observed none, besides eating before he was hungry, and drinking before he was dry; for that rule he was sure never to eat or drink much at a time. Besides, the warmth of air keeps the pores open, and, by continual perspiration, breathes out those humours which generate most diseases, if in cooler climates it be

not assisted by exercise; and this, probably, is the principal reason why English constitutions are so much benefitted by the air of the South of France and Italy, in cases of consumptions and other lingering diseases. For the honour, nevertheless, of our own climate, it has been observed by ancient writers, that the Britons were longer lived than any other nation known to them; and in modern times there have been more remarkable instances of long life than in any other country in Europe. The story of old Parr is too recent to be forgotten. This modern patriarch was brought out of Derbyshire, and introduced to the court of King Charles the First at the particular wish of that ill-fated monarch. He lived to the great age of 153 years, and, it was thought, might have considerably exceeded this, if the change of a country air and diet had not prematurely cut him off even at that age.

Robert, Earl of Leicester, who was a person of great learning and observation, as well as truth, "told me," says Sir W. Temple, "several very extraordinary stories on this subject: one of a Countess of Desmond, married out of England in Edward IV.'s time, and who lived far in King James's reign, and was supposed to have lived some years above a hundred and forty; at which age she came from Bristol to London, to beg some relief at court, having long been very poor, by the ruin of that Irish family into which she was married."

The same Earl tells another, of a beggar at a book-seller's shop, where he was some weeks after the death of

Prince Henry; and observing those who passed by, he was saying to his company, that never such a mourning had been seen in England: this beggar said "No, never since the death of Prince Arthur." The Earl of Leicester, being somewhat surprised, asked what she meant, and whether she remembered it. She replied, "Very well;" and on further inquiry told him that her name was Ransford, of a good family in Oxfordshire; that when she was about twenty years old, upon the deceitfulness of a lover, she had lost her reason; how long she continued in that state, nor what had passed in the interval, she knew nothing about; that when she was thought well enough to go abroad again, she was obliged to beg for her living; that she had been following this line of life for some before she recovered any recollection either of what she had been or where she had been born; that when her memory returned she went down to her nativecountry, where she could scarcely trace any of the relations she had left there. In consequence of this she returned to a parish in Southwark, where some small charity was allowed her, among other paupers, and where she resided for many years, -going once a week into the city, and taking whatever alms were offered to her. On inquiry at the parish, the account there given perfectly agreeing with the woman's account of herself, his Lordship ordered her to call at his residence once a week, which she continued to do for some time, when at length nothing further was heard of her.

Mad people are generally supposed to be long-lived.

If this, however, be true, it must proceed from the natural vigour of their temper, which disposes them to passions so violent that they end in phrenzies; and from the hardships to which they are restricted, as regards abstinence, diet, personal restraint, &c.—no other drink than water being allowed them, and very little meat, as connected with the curative intention.

Another story is told, from the above-mentioned noble personage, concerning a morrice-dance in Herefordshire, of which, he observed, that he had a pamphlet in his library, written by a very ingenious gentleman of that county, which gave an account, how, in such a year of King James's reign, there went about the country a set of morrice-dancers, composed of ten men who danced, a Maid Marian, and a tabor and pipe; that these twelve, one with another, made up twelve hundred years. The wonder is not precisely so much that so many in one small county should live to that age, as that they should be in such health and vigour, and, at the same time, in a travelling and dancing humour.

"I have in my life," says Sir William Temple, "met with two of above a hundred and twelve years, whereof the woman had passed her life in service, and the man in common labour, till he grew old and fell upon the parish. But I met with one who had gone a much greater length, which made me more curious in my inquiries. 'Twas an old man, who begged usually at a lonely inn upon the road, in Staffordshire, who told me he was a hundred and twenty-four years old; that he had been a soldier in the

Cales voyage under the Earl of Essex, of which he gave me a sensible account; that after his return he fell to labour in his own parish, which was a mile from the place where I met him; that he continued to work till a hundred and twelve, when he broke one of his ribs by a fall from a cart, and being thereby disabled, he fell to beg. This agreeing with what the master of the house told me, was reported and believed by all his neighbours. I asked him what his usual food was; he said milk, bread and cheese, and flesh when it was given to him. I asked him what he used to drink; he said, 'O! Sir, we have the best water in our parish that is in all the neighbourhood!' Whether he never drank any thing else? he said yes, if any body gave it him, but not otherwise: and the host told me he had got many a pound in his house but had never spent a penny. I asked if he had any neighbours as old as him, and he told me, but one, who had been his fellow soldier at Cales, and was three years older; but that he had been most of his time in a good service, and had something to live on now he was old. Instances are on record of many individuals above a hundred years of age brought as witnesses upon trials of titles and boundaries of estates, particularly out of Derbyshire, Staffordshire, or Yorkshire, and none above the rank of common farmers. The oldest person Sir William Temple ever knew any person of quality, or indeed any gentleman, either at home or abroad, was four score and twelve. This, added to former relations on the subject, either of long-lived races, or persons in any age or country, affords an easy

conclusion, that health and long life are usually blessings of the poor not of the rich, and the fruits of temperance rather than of luxury and excess.

Upon all general and particular surveys hitherto made, it may seem that mountainous and barren countries are usually the scenes of health and long life; that these have been found rather on the hills of Palestine and Arcadia than in the plains of Babylon or of Thessaly; and among us in England, rather on the Peak of Derbyshire and the heaths of Staffordshire, than the fertile soils of other counties, more abundant in population and in riches. Whether this may proceed from the greater purity of the air, or from the meaner condition, and thereby harder fare and more simple diet; or from the stronger nourishment of those grains and roots which grow in dry soils, is not easily to be determined; although it is evident from common experience, that the natives and inhabitants of hilly and barren countries have not only more health in general, but also more vigour than those of the plains or fertile soils, and that the former usually exceed the latter both in size and stature. For instance, the largest bodied men in any part of Europe are the Scotch highlanders, the Swiss, and the Northern Irish.

It is no less singular, that although men in mountainous countries are for the most part of greater growth, the cattle of all sorts reared in the same places are smaller than in others. This probably may be accounted for in consequence of the appetite of both man and beast being strengthened by the air of such places; and by the care

of parents in the education of their children: the latter seldom wanted food enough, of some kind or other, to supply nature, and appease the cravings of appetite, during the age of their growth, which must be the greater by the sharpness of hunger and strength of digestion in drier airs; for milk, roots, and oats abound in such countries, though there may be scarcity of other food or grain. But the cattle, from the scantiness of pasture and fodder, have hardly enough in summer to feed upon, and very often want in winter even the food necessary for the support of life; many are starved, and the rest stunted in their growth, which after a certain age never advances.

Whether the above be a sufficient reason or not, it will not be contested, we believe, one part of it at least, by any who may feel disposed to put it to the test, that the open, dry air of hilly countries, creates an appetite and a stronger stomach than that of the plains and vallies in which cities are commonly built, for the convenience of water, trade, and the plenty of fruits and grains produced by the earth, with much greater increase and less labour in softer than in harder soils. It is this faintness of appetite prevalent in such places, where the digestive organs are weakened, especially in large cities, that gives rise to the many provocatives so ingeniously contrived by art not only to rouse a dormant appetite, but to stimulate a morbid palate, where nature fails: and this is one great cause of luxurious living, and the introduction of so many various and extravagant inventions to improve

it, which certainly add to the pleasures of taste, without, however, at all promoting either health or long life. On the contrary, all great cities, and those most distinguished by the greatest concourse of mankind, as well as those inventions and customs of the greatest and most delicate species of luxury and Epicurism, are the most frequent scenes of the most ravaging diseases,—such, for instance, as Grand Cairo, Constantinople, Naples, &c. It is these which introduce the use of physic, and indeed the necessity of it, in all large towns and populous countries, which remoter and more thinly inhabited places are scarcely acquainted with.

These are the natural means by which life is prolonged, and it must be obvious, that, natural and simple as they are, they are by no means wholly accessible or even practicable by every one; but all have it in their power, more or less, to regulate their mode of living, so as to produce beneficial results, tending to ensure their health and to guard against disease, by which long life is more probable than where these objects are disregarded or neglected.

Having thus far discussed the subject of health and longevity, although the latter may be much the result of chance, and a co-operation of many known as well as unknown causes, originating in a variety of consequences, it must here be observed, as regards the former, that is, health in general, it is not so difficult to preserve it as may be imagined; although it is, not unfrequently, next to impossible to recover it when lost by a long continued

course of intemperance. The changes effected by nature, through the medium of disease, are generally for the better; and it has been remarked by physicians how quickly health is regained after the most dangerous fevers, brought on during the process of nature's operations,—whereas the chronic diseases induced by a course of debauchery and excess, bring on a degree of debility and exhaustion, which is rarely cured, and, at the same time, they deprive the body and constitution of that firmness, elasticity, vigour, and repelling power which, when once lost, is difficult, if ever, to be recovered *.

On the Precariousness of the Health of Old Men.

—Old age is not always a consequence of the number of years a man has lived. Many are comparatively old before they reach the prime of life, the consequence of intemperance, hereditary disease, and constitutional debility arising from various causes. At the same time, the vigorous state of health which is observed in some old men, we mean in those from about 70 to 79 and upwards, is frequently like a tower undermined. Such a tower may appear as solid, as strong, and durable as

^{*} By calculation it is shown, that of 1000 individuals 23 die in the birth; 277 from teething, convulsions, and worms; 7 in the measles; 2 women in child-birth; 195 of consumption, asthma, and other chronic complaints; 250 of fever; 12 of apoplexy; and 41 of dropsy. Or, in another point of view, of 1000 persons 200 die within the first year; 80 in the second; 40 in the third; and 24 in the fourth; and within the first eight years of life 446, or almost one half of the number, are cut off by premature death.

when it was first built; nevertheless it has no foundation, and is only shored up by a few props, which failing at once, it is ruined in an instant. In old men the foundations of life are destroyed—the radical piece is exhausted—the vital parts are worn and decayed—the machine is only upheld by a few props, that is, by the contexture, and the continuance of the motion at first impressed. This appearance of health may likewise be compared to those glass bubbles, which seem perfectly solid, but if you press them a little will fly into a thousand pieces.

DIRECTIONS TO OLD MEN, EQUALLY APPLICABLE TO THOSE ADVANCED IN YEARS.—It is no easy matter to teach one who is not acquainted with the structure of the human body how to understand his pulse; but rather let him observe if he has regular stools, and if his urine be of a healthful appearance. If he has usually one stool every day, and that in the forenoon, he need not fear disorders of great consequence, if especially withal he finds in the morning that his urine is of a pale, clear, amber colour.

Let his diet and exercise be moderate, regulating both in proportion as the habit of the body is gross or spare.

The gross old man should take his exercise chiefly in the forenoon, with as little nourishment as possible.

The thin and spare old man must have something light upon his stomach for breakfast, but should take his exercise after dinner.

As regards taking cold, each must guard the parts

most liable to its influence; the thin old man must go as cool as possible in the forenoon, at which time he will not be so apt to take cold.

An old man cannot safely part with flannel. Cornaro's rule will hold good in general for all, which was, to lessen the quantity of solid food as he advanced in years, but allowed it to be more nourishing.

Habits that have been used but to a moderate quantity of any strong liquors very rarely afterwards bear milk well; but if they will put as much cowslip wine as will half turn it, they may bear a small quantity of the clear liquor.

Chocolate is too heavy for an old person. Green tea will do for the gross man, but to preserve an appetite for dinner, use no butter at breakfast.

Small beer which is quite fine, or pure water, or such as has been filtered or boiled, are the best diluters at dinner; the gross man may add a little wine to his water.

Ale at supper is useful to most old people; it helps to finish the digestion of the day, promotes sleep, and keeps the body laxative; but let it be caskable, and not stale. Those who observe a very abstemious diet require it, should they not be old.

Upon taking cold let them keep warm, drink warm, diluting liquors, eat little, and encourage sleep, avoiding malt liquor, milk, and garden stuff.

Sleep is the old man's best cordial.

The gross man, if subject to pains, may use rum, or French brandy, diluted with hot water, in the evening, and so may the thin man, as long as the pains continue.

An old man is not to lose blood,—a little longer abstemiousness will answer the end.

Eggs are too heavy for old people; thin broths are better, and will answer an old man's purpose when he cannot digest meat.

Milk, with cowslip wine, as before directed, will do better than asses' milk.

The abstemious old man needs no other physic than the flower of sulphur, infusion of aloes, or an occasional dose of rhubarb.

A gentle emetic might be of much service to assist the digestive organs, if such could be obtained by means of some wormwood tea or chamomile flowers, assisted by tickling the fauces with the finger or a feather.

Warm stockings in winter, woollen hose over all, and flannel.

If warm strong liquors will not make him sleep, he will stand a bad chance by opiates, which occasion costiveness, the cause of numerous complaints.

He must be his own physician, unless an accident happens.

If inclined to be loose, he is of a gross habit, or an intemperate man, for abstinence cures it. In that case, all malt liquors, milk, butter, and vegetables, except what is made of rice or wheat flour, must be avoided.

Drink coffee, but never fill the stomach with any thing.
Use frequent emetics and lime water.

The abstemious old man will never suffer much from the gravel or stone, if his body is kept open.

Honey will gripe an old man.

Asthmas come upon hearty feeders, and are cured by emetics and abstinence.

If his urine is muddy, he has got cold, or his regimen is too phlegmatic.

The thin old man cannot sleep in a morning; the gross old man cannot rise early, unless he sleeps in the day-time.

In old age similar changes to those in the middle state of life are taking place in other parts of the body. The coats of the arteries gradually become thicker and stronger, and that of the veins thinner and weaker; the latter become more distended, and the livid hue of venous plethora succeeds the lively tint of arterial action. A tendency to consolidation in the latter period of life is apparent, and that which in the child was pliant cartilage, in the old man becomes brittle bone.

Towards the approach of old age, and in confirmed senectitude, the tepid bath is a grateful solace, by protracting that rigidity of fibre which is at once the great cause and symptom of decrepitude. It also proves emollient, and removes those decaying parts of the cuticle which obstruct perspiration, and give rise to the scaly appearance and dry harsh feel of the skin, so commonly observed in the declining periods of our existence.

Thus in the progress of life the human body undergoes various changes, continually verging towards the grand crisis: thus the florid freshness of youth, owing to the distribution and ramification of the minute arteries of the skin of the cheeks, subsides into the moderate hue of middle life, and this again into the shrivelled appearance of old age.

Thus the constituent parts of the living body are continually on the decay, and a variety of causes are incessantly carrying them off; several of its organs are constantly engaged in separating humours, which pass off loaded with a part of its substance, consumed by the uniting action of air and heat; while internal friction, by a pulsatory motion, detaches its particles. In this manner the animal machine is continually being destroyed; and, perhaps, at distant periods of life, it does not contain a single particle of the same constituent parts.

It has been no less a subject of consideration to determine the period of the entire renovation of the body; for which, however, it has been said, that an interval of seven years is necessary for the same particles to be totally obliterated, and their place supplied by others; and this change, it would appear, is more rapid in infancy and youth; it would also seem to be retarded in manhood, and require a very long time to be accomplished in old age,—a period at which all our parts assume a remarkable degree of consistence and fixity, at the same time that the vital actions become more languid.

There is little doubt, therefore, that sex, constitution, climate, profession, mode of living, and a variety of other causes, tend equally to accelerate or to retard the period of human life; so that it is next to impossible to affirm any thing certain, relative to the precise term of its duration.

CHAPTER V.

CAUSES AND SYMPTOMS OF POPULAR DISEASES.

To Judge by the Pulse.—That those who are about the sick when they are first taken ill may be able to form some probable conjectures of the disorder, the following instructions concerning the pulse are proper in the first place to be attended to.

In people of good health*, from the age of eighteen or twenty to about sixty-six, the pulse commonly beats between sixty and seventy times in a minute; in young children the number of pulsations is more, and in old persons less; in children under four years old the difference is at least a third. An intelligent person who shall often attend to his own pulse, and compare it with that of other people, will be able to judge with sufficient accuracy of the degree of fever in a sick person. If

^{*} In an adult male, of good health, and not too corpulent, the common standard of the pulse may be fixed at 70 beats in a minute; but it varies in different individuals from 60 to 80,—being greatly influenced by the temperament, and partly by the habit of life, of the individual. In an individual of a high, sanguine constitution, it rarely sinks below eighty, and is often at ninety beats in a minute. In the melancholic constitution it seldom rises above sixty, and sometimes sinks to forty. In some peculiar constitutions the discrepancy is so considerable, and complicated with other changes than those of frequency and tardiness, that there is no reducing them to any rule. The pulse in women, generally speaking, is six or eight strokes in a minute more than in the opposite sex, and hence many women of strong health and cheerful disposition have a standard pulse of 85.

the strokes are but one-third above the number in a healthy state, the fever is not very violent; and if the number is double, there is the greatest reason to apprehend that the disease is mortal. The pulse, however, must not be judged merely by the number of strokes: its strength or weakness, hardness or softness, and regularity or irregularity, must also be considered.

The words strong and weak need no further explanation. The strength of the pulse is generally a good prognostic; if it is too strong, it may easily be lowered. The weakness of the pulse is often a very threatening symptom. If the pulse excite the idea of a dry beat, as if the artery was of wood or any other rigid and inelastic substance, it is said to be hard; if the contrary, is called soft, and this is a better symptom.

If the pulse be strong and soft, though it be quick, it is a favourable indication; if it is strong and hard, there is reason to suspect an inflammation, and bleeding, with a cooling regimen, is necessary; but if it is at once weak, quick, and hard, the danger is imminent indeed.

When the pulse communicates a continued succession of strokes, in equal time, and of equal force, it is said to be regular; and if a stroke is sometimes wanting, it is said to intermit.

While the pulse is in a good and promising state of action, the breathing free, and the brain not greatly affected, the danger is not great; and if the patient take the medicines prescribed for him, and they produce the anticipated effects,—if his strength does not greatly fail him, and he is sensible of his condition,—there is just

reason to hope for his recovery. The danger is in proportion as these circumstances may be absent.

The most frequent Causes of Popular Disorders are the following:—

- 1. Excessive Labour or violent Exercise.—This generally produces some inflammatory disease, as quinsey, pleurisy, or inflammation of the chest; but the disease may sometimes be prevented by drinking plentifully of some temperate, refreshing drink, just lukewarm, while the patient is hot, and cold afterwards, if more agreeable. Sweet whey and butter-milk are very useful in similar cases, and even water, slightly acidulated with lemon juice or vinegar.
- 2. SITTING OR LYING-DOWN IN A COLD PLACE WHEN VERY HOT.—This at once checks perspiration, the matter of which, being thrown upon some internal part, proves the cause of many violent diseases, particularly quinsey, inflammations of the breast, pleurisies, and inflammatory cholics.

As soon as the symptoms of any of these complaints begin to appear, which is sometimes not till after several days, the patient should lose a little blood, his legs should be put into warm water, and he should drink plentifully of the following or other similar infusion:—

Take elder flowers, a handful*.

— honey 2 ounces.

— vinegar 1½ ounce.

^{*} By a handful is here meant as many as can be taken up between the thumb and finger.

Put them into an earthen vessel, and pour three pints and a half of boiling water upon them; stir the mixture till the honey is dissolved, then cover up the mug, and when the liquor is cold, strain for use through a linen cloth.

Such aids at the commencement will frequently check the disease; but if hot medicines are given, with a view to promote perspiration, the disease may assume a more serious appearance, should it not prove mortal.

3. Drinking cold water when a person is hot.—
This acts in the same manner as the preceding cause, but its consequences are commonly more sudden and violent. It produces quinseys, inflammations of the chest and stomach, cholics, inflammation of the liver and all parts of the abdomen, with swellings, severe vomitings, suppression of urine, and inexpressible anguish.

The remedies usually adopted in cases arising from this cause, are immediate bleeding from the arm, and by leeches to the seat of pain; copious drinking of warm water, with the addition of one-fifth part of whey; or the following simple ptisan, as recommended by a very celebrated physician:—

Take whole barley, well washed in hot water, two ounces, and boil it in five pints of clean water till the barley bursts; towards the end of the boiling throw in one drachm and a half of saltpetre; strain it through a linen cloth, and add to it an ounce and a half of honey, and one ounce of vinegar. This also must be taken warm. At the same time fomentations of warm water

should be applied to the throat, the breast and belly; and a clyster of warm water, impregnated with a little musk, injected. A half bath of warm water has frequently afforded immediate relief.

So many accidents occur from the fatal custom here alluded to, that it would appear almost hopeless to admonish people against this fatal custom, for none indulge in it through perfect ignorance. The most illiterate peasant carefully restrains his horse from drinking when he is hot, yet people from whom better things might be expected, sacrifice life for the immediate enjoyment of a momentary gratification, in which, however, they might, after the expiration of ten minutes, indulge with safety.

4. Inconstancy of the Weather.—We sometimes all at once, and by such sudden transitions, change our atmosphere, that nature, as it were, is attacked by surprise, and when she is least prepared to resist the shock. This she never fails to resent by giving rise to defluxions and colds, which are certainly more common among us than with the natives of most other countries. To avoid diseases from this cause, people should go less thinly clothed than the season seems to require; and those who strip while they use any labour or exercise, should be sure to put on their clothes the moment their labour or exercise is over.

As these changes of the weather are frequently attended with sudden, violent, and unexpected rain, it often occurs, that people are wetted to the skin, even

while they are in a state of perspiration with heat: if they continue the exercise they were using when the accident happened, without remission, till they can change their clothes, they will generally avoid ill consequences, otherwise they are in danger of fatal pleurisies. When the body and limbs have been wet, the best expedient is to bathe them in warm water, and rub them well dry before the fire with a coarse towel. If the legs and feet only have been wet, it will be sufficient to bathe them, and rub them dry. The bath on this occasion is rendered more effectual by a little soap being dissolved in it.

- 5. Close and unwholesome air.—The effluvia of dung-hills, stagnant water, privies, cellars, wells, and, in general, that arising from all confined places and putrified substances, are unwholesome, and decidedly productive of disease. To obviate this cause, the windows of small houses ought to be opened daily in all weathers, for a certain time; all close and confined places, ought to be duly and regularly ventilated, by the admission of free and fresh air; and all offensive effluvia removed, as far as possible, from every habitable dwelling.
- 6. Drunkenness.—Those who indulge in this loath-some vice, if they do not die of inflammations of the chest, plurisies, liver complaints, consumptions, or some other critical disorder, in the prime of life, sink infallibly into a premature old age, with all its debilities, infirmities, and pains. The weakness incurred by habitual recourse to the bottle is almost always incurable,

and so are most of the diseases arising from the same cause, as asthma, dropsy, consumption, &c.

7. Bad Bread.—This is allowed to be a much more general cause of disease than the public is aware of. Bread is bad either when it is manufactured from bad corn, or when it is adulterated with the pernicious ingredients too frequently introduced into its composition, for interested purposes, by unprincipled bakers,—such as alum, and potatoes, which certainly is the least evil of the two; but why should people be regaled with potatoes, when they pay for what ought to consist of genuine and wholesome flour? Bread may also be rendered unwholesome by its not sufficiently rising, or by its being baked too little. Children and sickly people suffer considerably by diseases arising from these causes.

Bad pastry, meat and fruit pies, and puddings, are extremely pernicious: the dough is often unleavened, ill-baked, and greasy, and it is stuffed with either fat or some ingredients which render the ill qualities of the dough more active. Women and children, who, in country places, and among the lower orders, consume most of this food, are those to whom it is most pernicious. It produces obstructions in the bowels, a slimy viscidity in the general mass of humours, general weakness, slow fever, a hectic, the rickets, and the king's evil.

Eating slowly and masticating sufficiently every kind of food, are considerations well worthy of attention; inasmuch as the food being thus duly prepared for the stomach, the process of digestion will be rendered less

difficult, the danger of a bad regimen greatly lessened, and the benefits arising from a good one greatly increased.

9. Bad Water.—In some country places this is a common cause of diseases; but the bad effects of water may easily be prevented by the following methods:—

If water be thick and turbid, or not clear, it should be left to settle before it is used, and it will generally become pure merely by settling. If not, and it appears to be slimy or muddy, it should be poured into a large vessel half filled with clean sand, and stirred about, so as perfectly to mix the sand with it. When the agitation is over, the sand will sink, and generally carry down with it all the foulnesses in the water. The following is a still better method:—

Procure two vessels, and place one, on a shelf or frame or other supporter, over the other. Let the upper one have a hole very near the bottom, and be half filled with sand; into this vessel pour the water, and it will be filtered by the sand, and pass clear out of the hole at the bottom, whence it will run into the vessel placed under it.

HARD WATER.—When water is hard, and will not wash well with soap, nor boil garden stuff tender, it should be exposed to the sun, or well boiled with some bread in it. If by any means people are reduced to the necessity of drinking water in a putrid state, they should dissolve a little sea salt in it, or mix it with a little vinegar, lemon juice, vitriolic acid, &c.; but putrid water may always be rendered sweet by keeping, filtering, or

even by boiling and suffering the sediment to fall to the bottom.

10. SITTING NEAR DOORS OR WINDOWS IN HEATED ROOMS.—In the winter season, in particular, when larger fires are kept up, and more candles used, than at any other season of the year, people, young and old, ought to be cautious not to expose themselves to draughts of air, or crevice winds, by sitting too near a door or window; as the consumption of air occasioned by the heat of the fire and candles will always be very considerable, which must necessarily be replaced by cold air rushing in at every aperture of the window or door, because no air can descend the chimney, the warm stream, always going up in that direction, preventing it. The smaller the apertures or crevices through which a stream of air passes into a heated room, the greater will be its impetuosity, as well as the liability of the pores of the skin to receive its impressions.

These observations may be illustrated in the following manner: let a candle be held at the key-hole of a door, or a crevice in a room, when there is a good fire and many candles burning, and you will readily perceive the constant current of air that enters by them. Besides, it is a constant observation, that, in winter time, our heels are often ready to freeze, sitting before a fire,—in consequence of the continual influx of cold air by the openings from without, and which draws towards the fire, to make good the waste of the air that goes up the chimney,—while our toes are in a continual glow of

heat; so, also, sitting by a fire, we are warm in front while our backs are cold from the same cause,—circumstances which, indeed, might very beneficially justify the presence of two fires at opposite extremities of the room. Those, therefore, who frequent public assemblies should be careful to avoid similar exposures to currents of air, to which they are singularly liable, in consequence of sudden transitions from heat to cold.

A person in health may with impunity leap into a cold bath, even though he be in a profuse perspiration, or out of his bed in frosty weather, under the same circumstances, without endangering his health, --provided he stop not too long; and yet a violent, and not unfrequently a fatal fever, a stiff neck, a sore throat, or a tooth-ache. is the consequence of only sitting a short time opposite or close to a stream of air. In the first case, the body undergoes one uniform and general shock, which renders it less fierce and dangerous; but in the second, a single part, the ear or neck, for example, is attacked with greater violence than where the whole frame submitted to the same cause. In further illustration of this position, the cannon of a battery, for instance, will sooner make a breach in a wall, when levelled against one single part of the bastion, than when discharged against the whole superficies of that wall.

CHAPTER VI.

THE CAUSES WHICH AGGRAVATE DISEASES, ETC.

It was a fatal and almost an universal prejudice that formerly prevailed, and which is by no means yet sufficiently eradicated, that all diseases, at the commencement, were to be cured by producing copious perspirations, by means of heating medicines, hot rooms, and a load of covering. "Whoever thus attempts," says Dr. Tissot, "to force a sweat at the beginning of a disease, takes pains to kill himself; and I have seen some cases in which the continual care to provoke this sweating has as manifestly killed the patient as a ball would have done, if it had been shot through his head." In all acute diseases, very few excepted, the blood is already too thick, and sweating, by forcing out its thinner parts, renders it still thicker. Let this be borne in mind, and an important error will be guarded against. Mild, attenuant fluids, instead of heating medicines, spirituous liquors, or malt liquors, are the best for this purpose, when such a state may be considered advisable: on the supposition that sweating was beneficial at the beginning of diseases, the method usually taken to promote it would nevertheless be attended with serious if not with fatal consequences. The first endeavour is, to stifle the patient with the heat of a close apartment, and a load of covering, taking, at the same time, all possible care to prevent a breath of air from getting into the room, -in consequence of which

unfit for the purposes of respiration, which, with the weight of the bed-clothes, is sufficient of itself to produce a fever, even if there had been no previous disposition to one. In the next place, the most heating things are administered, as Venice treacle, wine, hot beer, spirits, —as hot rum or brandy and water,—and other mixtures, and medicines which both heat the blood and confine the bowels, instead of those things which the patient requires to keep him cool and his bowels moderately open.

DISEASES IN WHICH PERSPIRATION IS BENEFICIAL. It is no less true, however, that sweating tends to cure some diseases in the beginning; but this happens to be the case only when the disease is simply and solely a consequence of checked or abated perspiration, and when the sweat is promoted without the use of heating medicines; or before the blood is become thick and the humours inflamed, before any internal infraction is formed, and before any load is deposited on a particular part. Sweating is also serviceable when the cause of the disease is removed by plentiful dilution: such sweats as these must by no means be checked, for the impeding of this discharge, which at such a time is no doubt of a critical nature, may be as fatal, under these circumstances, as an endeavour to force it in those already described. Upon the whole, let it be remembered, that warm water is the best thing to promote perspiration.

There is another vulgar prejudice, equally general and

equally dangerous, by which diseases are aggravated, namely, that the sick being weak must be forced to eat, that they may acquire strength to struggle with their disease. In consequence of this absurd and fatal notion, fevers that would not otherwise prove dangerous, are rendered mortal. Let the following truth, therefore, be henceforward believed and remembered,—that "never yet did any person in a fever die merely through weakness;" they may in fact, be supported, even for some weeks, by water only, and will be stronger at the end of that time than if they had taken solid food, since solid food can only increase their disease, and consequently their weakness, of which their disease is the cause. From the first invasion of a fever, digestion is weakened, if it does not precisely cease; whatever solid food, therefore, is taken, corrupts and adds strength only to the distemper.

The same prejudice that forces the sick to eat, under the idea that they thereby acquire strength, forces them to eat the most pernicious kinds of food, such as strong gravies, soups, eggs, and butcher's meat, as long as it can, by any effort however laborious, be chewed and swallowed.

If a man in perfect health should be compelled to eat stinking meat, rotten eggs, and sour broth, he would very soon be seized with vomiting, purging, and delirium; livid spots would at length appear, and he would be in the utmost danger from what is called the purple fever. Now, meat given to a man in a fever very soon becomes putrid, eggs rotten, and broth sour, so that he is in the same state exactly as the healthy person just described, who should take these aliments in their putrid state, and the disorders they would produce being superadded to that previously subsisting, it is not difficult to conceive what must be the fate of the patient. The only things, therefore, that can strengthen the sick, are those which weaken the disease.

Out of twenty sick persons who die in the country, two-thirds would have recovered, if they had only been lodged in a place where the air was sweet, and supplied with abundance of good water.

As long as there is a bitter or nauseous taste in the mouth, a loathing of food, a bad breath, heat and feverishness, with fetid stools, with scanty and high-coloured urine, so long all flesh, meat soups, eggs, and all food of which they make part, and all wine and cordials, are absolutely prohibited as poisons. "The prejudices which act contrary to these principles have cost Europe millions of lives!!!"

CAUTIONS NECESSARY TO BE OBSERVED IN VOMITING AND PURGING.—A third practice, very common and very dangerous, and used equally indiscriminately with others, is the purging and vomiting a patient at the beginning of a disease; which, although sometimes proper, should be generally considered as improper, and even hurtful.

The intention of purging and vomiting, at the commencement of inflammatory diseases, is to remove the load and oppression at the stomach, which causes a disposition to vomit, a dry mouth, a foul tongue, great thirst, and general uneasiness; but the inefficacy of that measure may be judged of, by considering the tongue as a kind of sample of the stomach: it may be washed, gargled, and even scraped, to very little purpose at first; but, when the patient has diluted several days, and the heat, fever, and sizeness of the humours are alleviated, this foulness will separate, and come away of itself: thus, the stomach may be purged over and over again, at the beginning of a fever, and be still foul, like the tongue, after washing, gargling, and scraping; but after refreshing and diluting remedies have been administered in proper time, it will become clean by a natural effort, and the effects of its foulness will disappear without purging; which, in these cases, when it does no good, does harm, by increasing the pain and inflammation, drawing the humours upon those parts which were before overloaded, discharging the thinner parts of the blood, consequently, increasing the thickness of what remains. Purges take the useful, and leave the hurtful humours behind. Vomiting does worse, if administered before the common humours have been diminished, by bleeding, and diluted by small liquors: it produces inflammations of the stomach, of the lungs, of the liver, suffocations, and inflammations of the brain.

CHAPTER VII.

SYMPTOMS, AND MEANS PROPER TO BE USED AT THE BEGINNING OF DISEASES.

THE greater part of acute diseases, give intimation of their approach a few weeks, and commonly a few days, before their actual invasion, by the whole or some of the following symptoms:—

1. Slight lassitude, or weariness; stiffness, or numbness. 2. Less activity and appetite than usual; a small load of heaviness at the stomach. 3. Some complaint in the head. 4. A profounder degree of sleep, though with less refreshment. 5. Less gaiety and liveliness. 6. A light oppression at the breast, and a less regular pulse. 7. A chilliness or propensity to be cold. 8. An aptness to perspire, and sometimes the suppression of an habitual disposition to sweat.

During these symptoms of an approaching disease, and before it has come on, it may generally be prevented, or at least mitigated, by carefully observing the following directions:—

- 1. Abstain from all violent exercise, but still use a moderate degree thereof.
- 2. Eat very little solid food, and wholly abstain from meat, meat-broths, eggs, and wine; substituting gardenstuffs and fruits, with light spoon-meat.
- 3. Drink plentifully, that is, three or four pints daily by small glasses at a time, from half to half hour, of the ptisans already directed; or balm tea, or of warm water, to each quart of which add a little more than three

spoonsful of vinegar, with two or three spoonsful of honey. A light infusion of elder or lindin flowers, or the blossoms of the lince, may be used with advantage; so may clear sweet whey, well settled.

4. Clysters of warm water should also be administered, but great care should be taken that the water be neither more nor less than blood warm. To these, a table-spoonful of table salt, or castor oil, may be added, as occasion may require.

When the disease is farther advanced, and the patient is seized with that coldness or shivering, which, in a certain degree, ushers in all diseases, and which is commonly attended with an universal depression, and pains all over the body, he should be put to bed with a little more covering than usual, and should drink, every quarter of an hour, a small glass of either of the ptisans before directed, or if they cannot be had, of the water with vinegar and honey, or even the water without either vinegar or honey, adding a few grains of common salt, and taking it warm. During the cold fit, the patients generally solicit a load of clothes, in which they may be indulged, provided they be removed in proportion as it abates. During the heats of the fever, the covering should be somewhat less than usual, and the patient should be on a mattrass in preference to a bed.

When the rigor is over, and the hot fit advanced, the following observations are absolutely necessary to be attended to.

1. The air in the room must not be of too high a temperature, the mildest degree of warmth being sufficient.

- 2. The sick should not be spoken to, and as little noise as possible should be made.
- 3. All the patient's evacuations should be immediately removed as soon as made.
- 4. The windows and door of the sick apartment should be opened at the same time, night and morning, for about ten minutes, or a quarter of an hour at the farthest, if the season be not too cold or inclement, so that the whole air of the room, if possible, should be changed; but the patient, at the same time, should be carefully guarded against the current of air, by drawing the curtains close round the bed. If the season be very cold, a few minutes may suffice for this purpose.

In summer, if the weather is close and sultry, one window may be left open day and night, with a curtain before it.

A little vinegar, poured upon a red hot shovel, will greatly conduce to restore the spring of the air, and correct its putrescence.

5. The patient should now abstain, rigidly, from all food, except the following, or something similar:—Take half-a-pound of good, well-baked bread, a bit of butter about the size of a walnut, and put them into three pints and a half of water; boil them till the bread is reduced to a thin consistence, then strain it, and give the patient an ordinary tea-cupful of it every three or four hours, or not quite so often if the fever is very violent. In lieu of this, in summer, the patient may be indulged with raw fruit, good of its kind, and perfectly ripe, and in winter, with boiled or baked apples, dried plumbs, and cherries.

Fruit is by no means hurtful in fevers, as many have obstinately supposed. The sick ardently desire it, and several patients have been known to recover who have eaten large quantities secretly, when it would otherwise have been withheld from them. Cherries, raspberries, and mulberries, are particularly recommended; apples, pears, and plumbs, being less succulent, are, therefore, less proper. China oranges and lemons, without the peal, are also good, either in substance, or in infusion; all of which may be taken often, in small quantities, in continued fevers.

The Patient's Drink, &c.—The drink best adapted to sick people, should be such as allays thirst, dilutes, relaxes, and promotes evacuation by stool, urine, and perspiration; and that already directed, or water with about four spoonsful of the juice of any ripe fruit; to a pint, should be taken to the quantity of six, or even nine pints, in the course of a day, at about three or four ounces, or the sixth part of a pint, every quarter of an hour, the cold being just taken off.

REGULATION OF THE BOWELS.—If the patient has not two motions in the course of 24 hours,—if the urine be high-coloured, and small in quantity,—if there be delirium, and the pain in the head and loins considerable, with pains also in the belly, and an inclination to vomit, the following clyster may be administered once a day, but not while the patient is in a state of perspiration:—

Take two pinches, between the thumb and finger, of

marshmallow leaves, and flowers cut small, and pour upon them a pint of boiling water; let it stand some time, and then strain it, and add an ounce of honey. If mallows cannot be immediately procured, pellitory of the wall, lettuce, and even spinage, may be used in its stead.

7. As long as the patient is able he should sit up out of bed at least one hour of the day—longer, if he can bear it, and shorter time, if he cannot bear it so long; but he should not be raised while he is perspiring.

THE PATIENT'S BED.—8. The bed should be constantly made every day, the sheets and linen should be changed every two days, taking, however, the greatest care that they are dry, even as tinder.

Nothing more conduces to protract a fever than keeping the sick constantly in bed, and withholding a constant and regular supply of fresh linen, though an unfortunate prejudice has established a contrary notion, to the loss of many thousand lives, that might otherwise have been saved.

*** A strict attention to the above simple rules has radically cured many acute diseases, without the interference of other medical assistance; and nothing is so certain than that it will alleviate them all, and render other means, where they can be procured, more effectual. Diseases are not to be expelled at once, by rough and precipitate usage; they must in a measure be allowed to run their regular course; and violent means cut short this course only by killing the patient.

patient is recovering from his sickness, he ought not to be impatient to recover strength by eating solid food, highly seasoned, and of supposed nourishing qualities. The quantity should be increased by degrees, and when the fever is completely abated, he should eat sparingly of white meats, light broth, and fish plainly dressed.

In proportion to the abatement of the fever, the patient should also lessen the quantity of his drink; he should eat little and often; he should chew his solid food well; he should go abroad as soon as he is able; if he rides, it should be before his principal meal; and all exercise should rather be taken before that meal, than after it; he should eat very little food at night, nor remain in bed above eight hours. The swellings of the legs and ancles, which usually happens about this time, will go of itself. It is not necessary the patients should go to stool every day; but they should not be without one above two or three. On the third day, they should have a clyster, or a table-spoonful of castor oil; and sooner, if they feel hot or puffed up, or if they are restless and have pains in the head. If they continue weak, with some irregular fever, from time to time, with a disordered state of the stomach and bowels, they should take half a drachm of peruvian bark three times a day. Neither ought they to return too soon to their ordinary occupations. Light nourishing food, pure air, moderate exercise, a little port wine, good home-brewed ale, and the like, will soon restore them to a sufficient degree of strength to enable them to return, with less risk, to their usual labours.

CHAPTER VIII.

THE SICK-ROOM.

In all diseases that require careful treatment, and as a means for the prevention of disorders, or to cut them short when once set in, a quiet apartment, moderate warmth, and diluting drinks, would often tend to the speedy recovery of the patient; and, if resorted to in time, these simple precautions might remove dangerous colds and fevers, both as regards children and adults.

From what has previously been said on the pulse, every mother or nurse may learn to distinguish a healthy pulse from one that indicates disease, that when the blood has an impulsion too violent, it may be abated. Neither children nor adults should, however, be confined to bed, when their health is affected, unless pain, loathing, or extreme lassitude, dispose them to a recumbent position, as in this state the mind is apt to be ruffled, a fresh cold may be caught, or the fever exasperated by watchfulness and anxiety.

As the whole art of medicine consists in discerning, and co-operating with, the efforts of nature, patients should, if not exactly confined to their beds, keep to their chambers, or in case the disease should prove lingering, prematurely betaking themselves to bed might certainly eccasion a cruel aggravation of suffering; and, as the parts on which the body must rest cannot be preserved from injury during long confinement, this step ought un-

questionably to be delayed by every palliative mean in our power. But when a sick person must be confined to bed, the greatest attention should be paid to prevent the skin from being irritated. The linen of the bed should be soft and smooth, crumbs of food carefully removed, the posture of the patient frequently changed, aided by a scrupulous attention to cleanliness: fumigating the apartment, removing every evacuation immediately, admitting fresh air at seasonable times, excluding all causes of irritation, as light, noise, conversation, and keeping every thing still and quiet, may not only retard and check a dangerous malady, but tend effectually to bring it to a speedy and salutary crisis.

A warm retired apartment, and the soothing attendance of a kind and experienced nurse, parent, or friend, with permission to lie down when it is particularly wished for, will often, at the commencement of diseases, prevent the necessity of going to bed, which, however, should not be objected to whenever the patient may desire it, whose particular sensations ought to be one rule; but whether they sit up, recline, or go to bed, the greatest quietness ought to be observed—while he ought to be advised to drink plentifully of some simple warm liquid, as whey, milk and water, tamarind, balm, or apple tea, currant jelly, dissolved in water, lemonade, or thin gruel, of oats, barley, or rice, &c.

PRECAUTIONS TO BE USED AGAINST INFECTION IN

THE SICK-ROOM.—On the first symptoms of fever, or other infectious disorders appearing, the patient ought to be separated from the rest of the family, except the nurse and necessary attendants. Linens of every description should be frequently changed, and soaked immediately in cold water, out of doors. Aromatic vinegar, sal volatile, camphor, or other strong scents, that may not affect the sufferer, must be allowed. All evacuations are to be instantly removed; the chamber fumigated and sprinkled with vinegar, the fumes of which, by means of a red-hot iron, carried about the room. Fresh air regularly and cautiously admitted. In cold, damp weather, a clear fire may be kept up. Children, who are most liable to infectious disorders, ought not to be suffered to frequent the chamber of the sick, neither ought they to go to places of worship, or schools, where epidemics prevail. These precautions being duly observed, will not only, in all probability, prevent disease from spreading, but prove a salutary means of securing a speedy and favourable crisis to most disorders.

CHAPTER IX.

AN EPITOME OF DIETETICAL PRECEPTS, ETC.

When a person takes a larger quantity of food than his digestive organs are able to assimilate into chyle, it can never turn to good nourishment.

Food highly seasoned with pungent salts, or spices and wils, corrupts the blood.

People of gross habits, and feverish constitutions, should eat sparingly.

Unseasonable abstinence is also attended with bad consequences. For without a supply of fresh chyle, animal juices naturally acquire putrescency. Inanition produces fevers of the worst sort, as those who fast too religiously feel frequently to their cost the insidious consequences.

In all chronic disorders, such a quantity of food is to be taken as is sufficient to support, not to overload, the stomach. The weak, emaciated, hectic, or consumptive, ought to observe the strictest regimen. To such, excess in any thing is attended with the most perilous consequences.

Nature abhors discordant mixtures—fish, flesh, wine, beer, cider, cream, and fruit. These distend the bowels with wind, and prevent digestion.

Bread made of the purest flour of wheat nourishes much, and binds the belly. Mixed with bran it is opening and less nourishing. The farinacea are all antiseptics. Wheat bread, properly fermented, and well baked, is the most valuable part of diet.

MILK is already elaborated, prepared, and digested in the body of the animal. It is an extract of animal and vegetable food. It is replete with nutritious juices, and wants little else than the colour to be blood. Where feverish heat predominates, in costive habits especially, butter milk and brown bread are truly specifics.

SEA-SALT, moderately used, is very wholesome, and the reverse if taken to excess.

The flesh of animals in the prime of life, of such as are castrated, and not used to hard labour, is best.

The flesh of granivorous birds is not so oily as that of water-fowls. Mutton is the best flesh for the delicate; beef and pork are proper only for the strong, and those who use hard exercise.

POND FISH, or such as are fat, are hard of digestion. Such as are caught near the shore are lighter. Boiled fish is lighter than roasted.

BITTERS bind the belly.

Acids gripe the bowels.

SALTED THINGS promote stool and urine.

Sweet things breed phlegm.—Celsus.

VEGETABLES.—Onions, leeks, radishes, and all the alcalescents, are antiseptic; mustard and cresses occasion a heat and difficulty of urine; celery is diuretic; aromatics, heat; coleworts and lettuce, cool; cucumbers are cold, crude, and hard to digest. Ripe fruits open the belly; unripe, bind and gripe. Pulses of all sorts are windy. Honey promotes urine and stools, but gripes many.

Soft bread increases acidity in the stomachs of those troubled with heartburns; biscuits, less; confections and dainties tempt people too much, and are hard of digestion.

Where the aliment ferments too violently, from putrescency, or from debility of the stomach, acids, bitters, aromatics, and alcalescents, are proper.

If cold cacochymy is added to bad habits, the patient

ought to abstain from farinaceous foods and jellies, because these increase the tenacity of the humours.

If the body begins to be puffed up with watery humours, broths are sparingly to be used; roasted meats, and fresh water fish, with generous wine, are indicated.

If acid acrimony abounds, as in young people, eggs, broths, hartshorn jellies, are best.

If the humours tend to an alkaline putrescency, barley broths, bread, and milks, are the fittest food. Acidulated liquids for common drink; and, if broths are allowed, they should also be acidulated.—Arburthnot.

STATICAL EXPERIMENTS.—It has been discovered that the body perspires but little, while the stomach is too full, or too empty; that full diet is prejudicial to those who use little exercise, but indispensably necessary to those who labour much; that food, the weight of which is not felt in the stomach, nourishes best, and perspires most freely.

That he who goes to bed without supper, being hungry, will perspire but little; and, if he does so often, will be apt to fall into a fever.

That the flesh of young animals, good mutton, and bread well baked, are the best food.

That the body feels heavier after four ounces of strong food that nourishes much, such as pork, eels, salt-fish, or flesh, than after six ounces of food that nourishes little, such as fresh fish, chickens, and small birds; for, where the digestion is difficult, the perspiration is slow.

That unusual feasting, frequently repeated, brings on a bad state of health.

That the body is more uneasy and heavy after six pounds taken in at one meal, than after eight taken in at three.

That he destroys himself slowly who makes but one meal a day, let him eat much or little *.

That he who eats more than he can digest, is nourished less than he ought to be, and so becomes emaciated.

That to eat immediately after excessive exercise, either of body or mind, is bad; for a body fatigued, perspires but little. -Quincey.

Drinks.—Wine, cider, perry, and all fermented liquors, are antiseptic.

When beer neither oppresses the stomach, nor binds the belly, but passes freely by urine, it may be allowed. Where it generates wind, passes sluggishly, or generates stony concretions, it ought to be prohibited.

Wine, drank too freely, weakens the man, as may be seen by his actions. Sweet wines promote stools, but they excite flatulency and thirst; they promote expectoration, but impede urine. Tawny austere wines are good when the body is loose, provided there be no disorder in the head, no impediment in spitting, or making

^{*} We rather question the propriety of this assertion; for, it is well known, that many people enjoy perfect and lasting health, who make but one hearty meal a-day.

water. Pure wine is best for the stomach and bowels; diluted with water, it is best for the head, breast, and urinary organs.

Strong Spanish, or Hungarian wines, strengthen the stomach.

MINERAL WATERS.—Some mineral waters are possessed of a spirit which helps digestion and promotes sleep. Patients require but little wine while they drink the waters. Hectics ought to drink none.

Mineral waters are all hard, and therefore unfit for domestic purposes, until they are deprived of their acid by boiling. Injudicious therefore is the practice of those who recommend the bath waters at meals: people of lax bowels may drink them, but none others.

Pure salt water is the best of all diluents, especially to those who are naturally costive.

Those who are troubled with stomach complaints ought to drink wine, or rather, good rum, or brandy and water. The latter are only lowered with water, the former are composed of we know not what.—Nat. Med. Dieteticon.

TEA DRINKING.—The use of tea might produce many salutary effects, were the custom confined to people of rigid fibres, and active lives. The penetrating quality of the fluid, added to the saponaceous antiseptic property of the sugar, would render the infusion miscible with the blood,—obstructions might be removed,—acrid salts diluted,—viscid phlegm dissolved; the astringency of the

plant might answer the good purpose of passing off the liquor more quickly; the sanguinary, the bilious, the phlegmatic, and the melancholy, might all find relief; fevers might be prevented in the young, and aches and obstructions in the old: the belly might be kept soluble, the urinary passage cleansed, and insensible perspiration, the healthiest of all secretions, might be promoted. But such is the force of example, the lazy, the indolent, and effeminate, men as well as women, of weak nerves, relaxed fibres, and foul juices, indulge them twice or thrice a day in the immoderate use of this beverage, which only tends more and more to enervate and emaciate them. Great tea-drinkers are always fond of gin; the one is taken to qualify the other, and, "a cup of good tea," with some, is merely an interlude to another half-pint of 'Hodges' celebrated cordial.

Exercise.—In general, that kind of exercise is best to which one has been accustomed, which best agrees, and which affords the great delight.

Exercise is best when the stomach is most empty. When the patient begins to perspire, grow weary, or short breathed, he should forbear till he recovers.

For the delicate and infirm, that sort of exercise is most proper which is performed by external help: e.g. gestation in wheel-carriages, horse-litters, sedan-chairs, riding, sailing, &c.

For such as are neither very robust nor very slender, that sort of exercise is best which is performed partly by foreign assistance. Of this kind, riding on horseback is among the foremost. By riding, the pendulous viscera are shaken, and gently rubbed against the surface of each other; meanwhile, the external air rushes forcibly into the lungs; and these, conspiring, produce surprising changes.

Sydenham had such a high opinion of riding, that he believed not only lesser evils could be cured by it, but even the consumption in the last stage. In this disease, he says, riding is a specific as certain as mercury in the lues, or bark in an ague; but he cautions phthisics never to fatigue themselves with it.

After exercise the body should be well rubbed, and dry linen, well aired, put on.

After exercise, every man ought to rest before he sits down to dinner.

Cold small liquors after exercise are pernicious.

Complaints, which arise from excessive labour, are cured by rest.

If the body, or any of its members, rest longer than usual, it will not become the stronger.

If, after a long habit of idleness, one enters immediately on hard labour, he will assuredly do himself an injury.

A soft bed is as irksome to him who is accustomed to a hard one, as a hard bed is to him who lies upon one of down.

Those who seldom use motion, are wearied with the smallest degree of exercise.

Friction is a sort of succedaneum to exercise.

Reading aloud, and singing, warms the body.

The inconveniences which are the result of excessive exercise, are, heat in the belly, pain, loathing of food, looseness, costiveness. In such cases, less exercise, warm bathing, sleep, cooling, moistening, and nourishing duet, with a cheerful glass, in moderation, that is, till it first begins to make one chirrup a little more than ordinary, are recommended,—this is a good rule.

Exercise is not to be enjoined to patients when they are very ill. It were dangerous thus to jumble stagnating corrupted humours: such mixtures stuff the lungs, not without danger of suffocation. Thus we see, cachectics, or leuco-phlegmatics, pant for breath in mounting one flight of stairs. In such cases, gentle frictions only are rational at first, then airing in a coach or chair, riding, walking, and at last, running.—Hippocrates.

SLEEP AND WAKEFULNESS.—These bear a great resemblance to exercise and rest. Different constitutions require different measures of sleep.

Moderate sleep increases perspiration, promotes digestion, cherishes the body, and exhilarates the mind.

Wakeful people should, nevertheless, keep in bed; as quiet and warmth, in some measure, answer the purpose of sleep.

Excessive sleep renders the body heavy and inactive, impairs the memory, and stupifies the senses.

Excessive watching dissipates the strength, produces fevers, and wastes the body.

He who sleeps through the day, and watches through the night, inverts the order of nature, and anticipates old age.

A late, heavy supper, is an enemy to sleep; going to bed without any supper, prevents sleep.

By statical experiments, we know that sound sleep is refreshing;—

That nocturnal perspiration arises, in this climate, to about sixteen ounces;—

That after a good night's sleep, the body feels lighter, from the increase of strength, as well as from the quantity of matter which it has thrown off by perspiration;—

That restless nights diminish perspiration;—

That perspiration is more obstructed by a cool southerly air, when asleep, than by intense cold, when awake;—

That change of bed diminishes perspiration; for things to which we are not accustomed, though better in their nature, seldom agree with us;—

That stretching and yawning promote perspiration;— That perspiration is more obstructed by throwing off the bed clothes when we sleep, than by throwing off our

clothes when awake;—

That wine, moderately drank, induces sleep, and increases perspiration; and that, drank to excess, lessens both.—Galen.

CHAPTER X.

SELECTION AND USE OF APERIENT MEDICINES.

MEDICINES of the cathartic class are very numerous; and, perhaps, to this may be chiefly attributed the frequent abuse, or rather want of discrimination, that is manifested in their exhibition. All medicines which accelerate or increase the evacuations from the intestines, or which when administered in a certain dose occasion purging, are designated according to their different modes of operation, and have been classed under two divisions, namely, laxatives and purgatives. The former operate so mildly, that they merely evacuate the contents of the bowels, without producing any general excitement of the body, or even stimulating the exhalant vessels of the canal; the latter produce a considerable influx of fluids from these vessels, and extend their stimulant effect to the system in general, and when these effects are very violent, the purgative is further distinguished by the appellation of drastic.

Laxatives may be said simply to open the bowels, and to carry off extraneous matter which is out of the course of the circulation; but purgatives, as they occasion a constitutional effort, may be made subservient to many important purposes. These distinctions, however, are of little practical utility, since purgatives in small doses are laxatives, and laxatives in large doses are purgatives. They constitute a very important part of the Materia Medica, and upon the proper administration of them,

the cure of numerous formidable diseases, both acuteand chronic, in a great measure depends.

Enumeration of the principal Purgatives and Laxatives, &c., with their respective doses.

Aloes, socotrine and hepatic 5 to 15 grains
Buckthorn berries1 to 2 drachms.
CALOMEL 1 to 12 grains.
Colocynth, pulp of, (bitter apple) 2 to 6 grains.
Cassia, pulp of
Castor Oil to 1 ounce.
Cream of tartar 1 to 3 drachms.
Croton oi1 to 2 drops.
Elaterium (wild cucumber) ½ to 1½ grain.
Epsom salts (see magnesia, sulphate of,)½ to 1½ ounce.
Gamboge5 to 20 grains.
Hedge hyssop
JALAP
Scammony the same
Rhubarb10 to 20 grains.
Senna1 scruple to 1 drachm.
Magnesia scruple to 1 drachm.
$\frac{1}{2}$ to 2 drachms.
——, sulphate of (Epsom salts) $\frac{1}{2}$ to $1\frac{1}{2}$ ounce.
Sulphur, washed to 2 drachms.

To these may be added all the neutral salts, various preparations of mercury, &c.; also sea water, Cheltenham, Epsom, and Scarborough waters.

THE INTENTION OF PURGATIVE MEDICINES ARE-

1. To unload the bowels from their contents when contained too long. For this purpose any purge will answer the purpose, provided its effect be produced, and it does not leave a tendency to costiveness behind.

- 2. As general evacuants, to diminish the bulk of the circulating fluids, and especially the watery part of the blood; or, in other words, to determine from the head and other parts, in inflammatory and other diseases.
- 3. To stimulate the absorbent system, and withdraw the fluids, which the absorbents take up when the blood is scanty, and needs not being evacuated.

A purge generally leaves costiveness behind, from two causes: first, from the intestines being evacuated thoroughly; and, secondly, from the torpor succeeding to excitement.

Aloes.—The medicinal properties of aloes are cathartic, stomachic, emmenagogue, and vermifuge.

In cachectic and chlorstic cases, hypochondriasm, habitual costiveness,—the consequence of a sedentary life,—torpor of the intestines, aloetics will be found serviceable.

The dose, as a purgative, is five to fifteen grains; but when administered as an emmenagogue, or gentle laxative, two grains to five, twice or three times a day.

The long-continued use of aloes is apt to bring on the piles;—it is scarcely necessary to observe, that it is an improper purgative in these, and in affections of the lungs, in pregnancy, or in inflammatory complaints. They warm the stomach, and stimulate the rectum and adjacent vessels; hence they are proper in the retention of the periodical discharge of females.

With gentle tonics, aloes are the best medicine in indi-

gestion from mere want of tone; with chalk mixture, they are excellent in heartburn; with assafætida, in the hysterical complaints of women; and with the compound extract of bitter apple, they form an excellent purging pill. The aloe pill, as also the aloe pill with myrrh, are excellent preparations. An elegant tincture of aloes may be made as follows:—

Take socotrine aloes*

liquorice-root, of each 1 ounce. spirits of wine 1 pint.

Let them digest for twelve days; dose, ½ an ounce to 1 ounce.

Aloetic Pills, in indigestion and weakness of the stomach, &c.

Take socotrine aloes $\frac{1}{2}$ scruple.

Turkey rhubarb $\frac{1}{2}$ drachmextract of gentian 1 scruple.

Mix, and form into a mass, of which make twenty pills: dose, two twice a day.

Another:

Make twenty pills; dose as above.

In debilitated constitutions, weakness of the chest and

^{*} There are three sorts of aloes kept in the shops for use: the socotrine, which is the best, is imported from the island of Socotora, in the Indian Ocean, wrapped in skins; the Barbadoes, or hepatic, from the West Indies; the caballine, or horse aloe, is said to be the most impure part of the latter, and is distinguishable by its strong, rank smell.

bowels, accompanied with loss of appetite, and habitual costiveness, these pills will be found of singular service; and to none more so than to those accustomed to sedentary occupations, or intense thought.

For obviating the effects of opium upon the intestinal canal, the judicious addition of some purgative offers the most effectual corrector, and the aloetic preparations, e.g. the tincture, are to be preferred on such occasions.

CALOMEL.—This preparation of quicksilver is much used, both in adults and children; to the latter it is one of the best, when properly administered, independent of its having no taste. It is very sparingly soluble in water, and therefore must always be given them in something of a thick consistence, and to the former as a pill or bolus.

Calomel is a powerful, irritating purge; but if properly prepared is safe, and not productive of spasm. It has the property of evacuating mucus; by exciting the peristaltic motion during its action, it removes all the glairy fluid. In children, it is useful to join it with the compound powder of chalk, to prevent griping.

From six to eight grains of calomel will purge most people; it is generally given the night before, but a much larger dose is necessary. It is common here not to give more than three or four grains over night, and to prescribe a solution of Epsom salts early the next morning.

Calomel is now more extensively used than almost any other article in the Materia Medica. It is capable of curing every form of syphilis, provided it do not run off

by stool; and in obstructions and affections of the liver, in well-regulated doses, it is a valuable remedy. It is also diaphoretic, and imparts a force to many of the mild medicines, and moderates the severity of drastic ones. In larger doses it is one of the most efficacious purgatives, especially when combined with other cathartics.

It is particularly recommended for clearing the intestines of children, who can generally bear larger doses than adults; and in bilious fevers, colic, and cholera morbus. It is the best remedy in yellow fever (six grains every six hours) assisted by the external inunction of the strong mercurial ointment, to excite mercurial action as early as possible.

CASES IN WHICH CALOMEL IS BENEFICIAL.—In hypochondriasm, when the stomach and bowels are loaded and foul, strong doses of mercurial purgatives are occasionally necessary, particularly in those whose bloodvessels are full, and whose energies are considerable. Where this state of the system is indicated by a laborious action of the heart, which is perceptible by the distressed state of the patient,-or by a swimming of the head, depending upon repletion of the bloodvessels, it is to be reduced by cupping; and if the secretion of the bile be deficient or irregular, the repetition of a grain of calomel, made into a pill with a bit of hard soap, daily or every other day, persisted in for a week or two, will frequently be found of the greatest benefit, in restoring the secretions, and bringing back the stomach to the healthy state.

When Calomel is injurious.—It not unfrequently happens, that in hypochondriacs, though the bile be duly secreted, it proves an insufficient stimulus to the intestines, either from its being neutralized by the acid, which passes from the stomach to the duodenum, or first small intestine, or from the bowels being in a too permanently torpid state to be excited by it. In similar cases, the repeated use of calomel, as a stimulus to the liver, cannot fail to be injurious. The intestinal canal itself should be chiefly attended to; and purgatives of a liquid kind, or those easily rendered liquid, should be employed in its stead.

About a table-spoonful of the tincture of senna, rendered more grateful to the stomach by the addition of a little of the compound tincture of lavender, or of ginger, and taken at bed-time, without the addition of water, will often cause an easier night's rest, and will also operate mildly the next morning. This is an extremely useful formula in preventing the necessity of resorting to the too frequent repetition of more bulky or more violent cathartics.

On the same principle, lenitive electuary (confection of senna), and various domestic preparations of that drug, and of other mild laxatives, have their uses; for it should always be recollected, that violent purging is not the intention to be accomplished, but only permanent regularity of evacuation.

With gamboge, or the compound extract of bitter apple, calomel is useful in obstinate costiveness. In costiveness with nausea, it is beneficial, as other purgatives

which have a disagreeable smell and taste are apt to cause vomiting. In jaundice it is extremely useful, and in inflammation of the liver it is the sheet anchor, from three grains to six, assisted by the external inunction of the strong mercurial ointment, as in yellow fever; when once salivation is induced the patient is generally safe.

The dose of calomel, as an alterative, is from $\frac{1}{4}$ to 1 grain, night and morning; as a purgative, from 2 grains to 12.

Pills in jaundice and inflammation of the liver.

Take calomel 6 grains.

opium...... 3 grains.

Spanish soap $\frac{1}{2}$ drachm.

Make six pills, one to be taken three times a day.

Mercurial Purge.

Take calomel 4 grains.

electuary enough to make a bolus.

To be taken at bed-time.

The following morning:—

infusion of senna 2 ounces.

hot water 2 ounces.

Or,—

Take ½ ounce of Epsom salts, in a sufficient quantity of water.

Cathartic Bolus of Calomel, &c.

Aperient electuary in piles.

Take confection of senna $1\frac{1}{2}$ ounce.

precipitate of sulphur $\frac{1}{2}$ ounce.

syrup of roses..... enough to make an electuary.

Dose the size of a nutmeg, three or four times a day, until the bowels are conveniently opened.

Colocynth, or Bitter Apple.—This is a species of gourd, of a spherical form, of a light yellow colour externally, and containing a white pith within, like that of a reed, which is extremely nauseous, bitter, and acrid. This pith or pulp is brought to us dried from Aleppo; the gourd grows in many parts of Turkey.

In small quantities it purges violently, and often produces irritating pain in the intestines, and bloody stools. The compound extract is a good form, and is one of the most convenient drastic purges; five grains form a good purging pill; or,—

Take aloe pill with myrrh

extract of colocynth each ½ drachm.

Make twelve pills, and take one or two occasionally.

Purgative Pill.

Take compound extract of colocynth..... 1 drachm. compound powder of senna 2 scruples.

Make twenty pills, one or two to be taken occasionally.

These are convenient forms for giving drastic purges, when required. They are all stimulant, consequently are never proper in inflammatory diseases. They may be used in hysterical complaints, indigestion, chronic weakness, and in cachectic weakness, to obviate costiveness.

ELATERIUM, OR WILD CUCUMBER.—This is infinitely more powerful than the last; it is one of the most irritating; drastic purges. It stimulates the vascular system in irritable habits to such a degree, that the person feels a pulsation every where, even in the arteries of the fingers. It has been known to completely evacuate a dropsy in twenty-four hours. It produces uncommon nausea, which can only be avoided by a quiet posture, and by mucilaginous diluents and broths. It is given in doses from $\frac{1}{4}$ to $1\frac{1}{2}$ grain. From 1 to 2 grains will produce, for twelve hours, a discharge of a very watery, serous fluid, but it does not produce the uncommon disorders in the system that colchicum or meadow saffron does. It seems to operate in two ways, both of which are beneficial in dropsy,-first, by stimulating the absorbents of the cavities in which the fluid is extravasated; and secondly, by stimulating the intestines in a peculiar manner, so as to cause them to throw out the water of the system. Young men have been completely cured of dropsy by it, by giving tonics afterwards; but considerable caution is necessary in administering it to the delicate, or those worn out by disease. The patient should not drink much after taking it, and be quiet for some time after, else it will produce nausea, or sometimes violent vomiting; and even then it purges as much as ever.

THE PULP OF CASSIA.—The pulp is a gentle aperient and nutrient in fevers, and is useful where stronger purges might be injurious. The electuary of cassia may be

given from two drachms to half an ounce. It forms a good basis for electuaries.

of which make an electuary, and take about the size of a small nutmeg occasionally.

Castor Oil.—This is a mild purgative: half an ounce purges most without pain; an ounce purges rather more violently, but seldom disorders the stomach. No purgative is so useful where the patient is subject to an accumulation of bile; if given once or twice a week it will prevent its gathering. It is also useful in complaints of the kidneys, and in bilious diarrhæa. In the dry belly ache, and Devonshire colic, it is the best and only purge; half an ounce, every four hours, with 10 drops of the tincture of opium:—or, it may be made into an emulsion, in the following form:—

blend the oil with the mucilage, pour the mint water on gradually, and keep stirring it; then add the other articles in the same manner. Dose—a fourth part every four hours.

Castor oil is so mild that it may be given to infants; and like all other oils, it is a good vermifuge, or worm

expeller: nor is there a better purge in maw-worms, giving tonics in the intervals. It is also useful in clysters, and in severe colic, from lumbrici or earthworms; it is the best purging clyster that can be administered in the following form:—

To be injected at twice.

In colic, calculous complaints, gravel, iliac passion, Devonshire colic, obstinate costiveness, piles, dysentery, &c. it is not only the mildest but the best aperient, as well to children as pregnant women: and may be taken, as above, in the form of an emulsion, in any aromatic water, in some mucilaginous menstruum, as gum arabic, or the yolk of an egg, adding a little spirit; or floating on a glass of common water, or in peppermint water. Its taste is by no means disagreeable; and in all cases, where as a purgative it may be prescribed, it ought to have the preference given to it, not only from the mildness with which it operates, but from the efficacy it is known to produce.

Rhubard.—This plant appears originally to have been a native of China and Thibet, but has been transplanted into other countries, and grows well in Europe. It is brought from the East Indies, Turkey, and Russia, and is cultivated in small quantities in England.

It possesses considerable stomachic, tonic, and astrin-

gent, as well as laxative powers; though after taking it, there is generally costiveness for a day or two. It is employed in dyspepsy, or indigestion, as a laxative, and in weak bowels, where the intention is merely to free them from their contents, without irritating, or debilitating them. It is often combined with tonics, whose power, in costive habits, it increases.

From fifteen grains to half a drachm, is a mild cathartic. A drachm purges briskly: it operates slowly three for four hours after it has been taken, without griping; and is more employed than any other astringent purgative, for the following reasons: namely, it does not require a large dose, is very certain in its operation, and does not weaken as many others do. It is used in hypochondriasm, or lowness of spirits; in hysteria, attended with costiveness, and in nervous head-ache: e. g.

Take fine Turkey rhubarb.

nutmeg, in powder, of each... ½ drachm. extract of camomile ... 1 scruple. oil of peppermint 6 drops.

mix and make 30 pills; of which, let three be taken twice a day, or as occasion may require.

Another:-

Take fine Turkey rhubarb $\frac{1}{2}$ drachm.

jalap, in powder 1 scruple.

extract of camomiles 1 scruple.

oil of cloves 6 drops.

make thirty pills, to be taken as the former.

In small doses, rhubarb is astringent, and is highly

beneficial in the bowel complaints of children: where there are green and slimy, or acid stools, it is the principal remedy, in small dozes: e. g.

a dessert spoonful, every four or six hours.

Combined with tincture of opium, it frequently cures diarrhoea. In small doses, also, it frequently acts as a stomachic, and increases the powers of digestion: e. g.

make 20 pills, and take one twice a day.

It imparts its virtues to water and spirit. The compound tincture of rhubarb is a good preparation, and taken from six drachms to an ounce, it frequently gives relief in colicky pains of the bowels. Also, combined with magnesia, it corrects flatulence, arising from acidity in the stomach; and acts as a tonic purgative, &c.

JALAP.—This is the mildest of all the drastic purges, and nothing is required to increase its power. From 15 grains to half a drachm purges briskly, and mostly gripes, in consequence of the quantity of resin it contains. This griping, however, may be obviated by aromatics, and by mucilaginous diluents and broths taken freely.

Cream of tartar, triturated with it, divides, and renders it more active. It is very agreeable to some when mixed

with treacle, or honey, flour and ginger, and made into ginger-bread.

Ward's dropsy powder was composed of equal parts of jalap, florentine iris, and cream of tartar, coloured with bole armoniac.

The purgative quality of jalap resides in its gum resin. The resin gripes, and purges scantily: the gummy part is said to be diuretic. The tincture of jalap is a useful preparation, and is often added, in the quantity of a drachm, or a drachm and a half, to an ounce and a half of the infusion of senna, to quicken its operation.

In inflammatory complaints, it is never proper, from its possessing a certain degree of stimulating property, which it communicates to the whole system. It is a good purge in hysterical cases, if given in a moderate dose. Mixed with equal parts of magnesia, it is rendered so mild, and free from griping, that it may be given to children with safety and advantage.

When jalap can be procured good, it is a valuable medicine. It is often found adulterated with briony root, which may easily be detected by its pale colour, and less compact texture, and by not easily burning at the flame of a candle. When the teredo has attacked it, it should be rejected. Among petty, unprincipled dabblers in drugs, it is often sophisticated with linseed meal, to give it bulk, as the best rhubarb is frequently with flour or barley meal.

The action of jalap is said to be promoted by the addition of ipecacuanha, or tartarised antimony: e. g.

In dropsy, its combination with cream of tartar, is calculated to promote its beneficial operation: and, as an hydrogogue purge, it has been greatly extolled; but, for this purpose, it will act better in conjunction with calomel, in the form of a bolus.

Manna is purgative from one ounce to one and a half, and was formerly joined with vitriolated natron; though it is by no means a good purge. It is very useful for children, who are habitually costive, and who have not much glairy matter, requiring calomel: e. g. manna—half an ounce—with a sufficient quantity of simple syrup.

Manna, and an equal quantity of the oil of almonds, with the addition of a little water, forms a useful emulsion, in cases where opium is necessary, as it prevents costiveness, in the teething and catarrhal affections of children.

TAMARINDS.—The pulp of tamarinds is an agreeable, useful, and gentle aperient. It also forms an useful febrifuge drink in those of the inflammatory kind, except in those attended with discharges.

Senna.—This is a safe purgative, but probably too stimulating in inflammatory disorders. It operates fully but not drastically. It frequently gripes, although this effect may be obviated by aromatics, as ginger, nutmeg

or a little brandy; and liquorice root will cover its unpleasant taste. It always brings away a great quantity of serous fluid. It is generally given in infusion, or in conjunction with Epsom salts: e. g.

CROTON OIL.—The oil expressed from the seeds of the croton tiglium, is a powerful purgative. In some cases, a drop applied to the tongue, has produced many loose watery stools, and one or two drops has sometimes brought on an alarming hypercatharsis. It is also used as an external application, in rheumatism; and, according to some, a few drops rubbed about the navel, will prove purgative. A drop may be taken in any mucilaginous mixture, rendered palatable by syrup.

Cathartics, next to blood letting, are the most powerful means of diminishing the force and quickness of arterial action; and are indicated at the commencement of all fevers, to carry off matters irritating, from their bulk or quality; to remove costiveness, to weaken the action of the heart and arteries, by increasing the secretion in the intestinal canal, and by determining a greater flow of blood into the intestines: they are also indicated in almost all inflammations, and in all sthenic diseases.

THE END.

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